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HOSPITAL
TRAINING-SCHOOL METHODS
AND
THE HEAD NURSE

BY
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Preface

ONE of the most significant and at the same time hopeful words used in discussing present conditions is the word "problem." We hear it everywhere. "Church problems," "industrial problems," "social problems," "city problems," "rural problems," loom up on every side. The word itself is prophetic, for as soon as a condition takes definite shape as a problem demanding solution, the time of its solution is never very far distant.

The hospital world has its problems—weighty and perplexing many of them are. Not the least of these is the training school. The training school has been for years a very perplexing, as well as a highly important, part of hospital work. Considering the fact that every year, boards of managers with but very imperfect conceptions of their responsibilities have been busy launching and "managing" training schools, and that nurses and physicians with just as imperfect conceptions of the qualifications and requirements for teaching have assumed the responsibilities of instructors in these training schools, it is not strange that the training school problem has arisen. Confusing and difficult as it is, at present, the condition would be still more unfortunate and discouraging if it were not regarded as a problem; if this present chaotic condition did not perplex and disturb.

In the beginning of the era of trained nursing in America, we were satisfied with a rudimentary training.

Little by little this has been added to, until at the present time, a hospital which admits a pupil to its training department is expected to start her in at the kindergarten stage in nursing, and conduct her by a swift high-pressure system, clear through the university stage all in the short space of two or three years.

This handbook is an attempt to discuss some phases of the training school problem; to suggest to workers in that field, plans that have been tested; to give definite help to those who are beginning the work of teaching and supervising in hospitals. It has been undertaken because of a sincere conviction that such a book was needed. Good text-books dealing with 'nursing, the real practical bedside care of the sick, are plentiful, but on the subject of methods of teaching and supervising, our stock of literature is woefully scant, if, indeed, there is anything on the subject available.

Experience and observation have shown that many capable graduate nurses who assume the responsibilities of teachers and head nurses have but a very vague idea as to their relation to the institution, its officers, patients, physicians, pupil nurses, and other head nurses. They have but faint conceptions as to their opportunities or the scope of their influence. They have given but little thought or study to the question of how to teach. The suggestions contained in this little volume will probably not all be applicable to any one institution, head nurse or teacher, but it is expected that some suggestions will be found useful to all. They are the outcome of no little experience in observing, supervising and teaching nurses. The matter has been "in the loom" for a number of years, and the author sincerely regrets that because of lapse of

time and the distractions of hospital life, it is impossible to name all the sources from which inspiration and practical points have been obtained. To the members of The American Hospital Association and the American Society of Superintendents of Training Schools, whose writings have furnished valuable suggestions, her obligation is great.

Some of the papers on "The Head Nurse" have appeared in the columns of "The Canadian Nurse" magazine, and some sections of the papers on teaching in the "National Hospital Record." The author takes this opportunity to thank the readers of those journals in the United States, Canada, and England who have taken pains to write and personally express appreciation of her attempts to pass on the knowledge gained by experience and special study. The very general and cordial welcome accorded to the papers that have been presented on the subject in those journals has seemed to justify the effort to revise, add to, and put them into permanent form. The greater part of the book is now given to the public for the first time.

The criticism of the Irish literary reviewer, that "There was so much omitted that should have been in the book," doubtless applies to this little handbook. It is in no sense intended to be exhaustive. As a pioneer in its special field, it doubtless is defective in many particulars. It is believed, however, that it may be useful in directing more attention to the questions of how to teach, what should be taught, and the responsibility of head nurses and supervisors. It is hoped that it may afford practical help, not only to the nurse who is beginning to teach, but to all who are in any way dealing with the problems of the training school.

CHARLOTTE A. AIKENS

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Hospital Training-school Methods and the Head Nurse

CHAPTER I

The Problem Stated

Nursing, in the modern acceptance of the term, is both a science and an art. Its real essence is and must always be personal service to the sick or helpless. The study of the science is valuable in direct proportion to the extent to which it helps the student to practise the art, and render that service intelligently and efficiently. The real care of the sick must always be the first consideration. All other aspects of nursing are, and must continue to be, secondary in importance. The ideal training is, therefore, not that which covers the most ground, but that which fits a nurse to render the highest and best practical service to the sick.

Essentials of nursing are the things which concern all nurses: the skill and knowledge which every trained nurse who has a right to the name needs, whether her service is rendered in city or country, in home or hospital or camp, whether as an executive or an independent or obscure worker. Beyond the circle in which is included the essentials of nursing there stretch in all directions wide and alluring fields of knowledge. In attempting to teach the essentials, little by-paths have been started leading into

these broad and attractive fields. To wander off and get confused ideas regarding essentials is as easy as to get confused in a strange city where a number of roads meet. These by-paths, many of them, lead to specialties to which nurses may legitimately aspire after a certain experience has been gained. No human being, nor organization, has a right to say to another human being, or class, "Thus far shalt thou go in the pursuit of knowledge but no farther." That right belongs to no one. Every nurse, in common with every other individual, has a right to develop her God-given talents as she chooses and finds opportunity.

There is no real reason why the hospital pharmacists of the future should not be nurses who, having mastered the essentials of nursing and graduated as nurses, have followed up the elementary knowledge of drugs obtained by a full course in pharmacy. There would be decided advantages in having the dietetic department of a hospital in charge of a nurse who had specialized in the branch of dietetics. If the matrons or hospital housekeepers were nurses who had, in addition to a nursing education, acquired a thorough knowledge of household science, there would be still further advantages. No one is able to say that progressive physicians in the future will not choose nurses as assistants in pathologic laboratories; that they will not find nurses who choose that line of work and are adapted to it more valuable in such work as making blood-counts, analyzing specimens, etc., than many of the internes who now perform such service. Nurses have been trained by leading surgeons to assist as anesthetists. Nurses have become expert surgical assistants. Thus, these illustrations might be multiplied regarding special lines of work connected with the care of the sick, in which

nurses may possibly engage. What new work will be demanded of or intrusted to the nurses of the future no one can foretell.

In the teaching and training of nurses the greatest difficulty has arisen from the confusion of ideas that exists regarding the essentials, the things which it is necessary that all nurses should know, and which hospitals are responsible for teaching. Clearly, a school which announces that it will provide an all-round training for nurses is responsible for teaching the essentials. It ought not to be a difficult matter for hospital organizations to agree as to what these real essentials are. In business circles there is a broad and thoroughly understood policy and coöperation that is in itself a source of strength, relief, and security. There is no reason why hospitals should not reap the same benefit from coöperation, at least as regards the teaching and essentials of nursing. There is no real reason why they may not come to an agreement as to what these essentials are, if they will seriously and impartially consider the matter from its foundations, and in its entirety, and work together with a determination to find a solution of the problem and accept it.

Inasmuch as the primary business of hospitals is really to care for the sick, it does not seem reasonable that hospital training-schools which undertake to teach nursing from the very foundations should be expected to do more than teach the essentials of nursing. It does seem reasonable that schools which claim to give postgraduate training should be expected to go beyond the essentials. A nurse who reënters a hospital for postgraduate training has a right to expect a systematic advanced course of study in some direction.

The problem that underlies all other phases of nurse training and progress is, then, the problem of the essentials. What are the essentials of nursing? Centering around this problem are numerous others that rightly claim attention. How shall these essentials be taught? Who shall teach? Whom shall we admit to be taught? Whom shall we exclude? How long should a nurse be required to spend in acquiring a working knowledge of the essentials of nursing? These and many other questions are pressing for solution. Out of all this chaos and confusion of tongues must inevitably come a clearer vision of the question, Where does the hospital's responsibility to a candidate whom it admits for training begin and end?

CHAPTER II

Planning the Course of Study

At the present time considerable diversity of opinion exists as to the length of time required to teach nursing properly. The three-year term was adopted by leading hospitals years ago, when there was a great deal of nursing material from which to make selection of candidates. All over the country, hospitals, small and large, followed the example of the larger hospitals in adopting three years as the limit of the training period. It was found to be a distinct advantage to the institution to retain nurses for another year, and, of course, more time was available in which to teach. Nurses could pursue their studies more leisurely and went out at graduation with an added year of experience, which is always valuable. In many hospitals more thorough teaching was done under the three-year régime, but in many this desirable effect from a lengthened term has not been realized. With more time, more studies have been added year after year, many of them of very little, if any, practical value in a nurse's course. There is a growing number of intelligent people in different parts of the country who believe that it is still possible to teach nursing, and teach it properly, in two years. As previously stated, there can be no possible objection to a nurse following up any subject in which she may have a special interest. If she wants to add to nursing medicine, and to medicine pharmacy, and to pharmacy

sociology, psychology, or biology, there will not be lacking people who will bid her God-speed in her pursuit of knowledge. "Hitch your wagon to a star" is very good advice to any student, but if a hospital training-school teaches nursing, and teaches it thoroughly, and teaches real hospital work and methods besides, it will have done its share toward equipping nurses for their life-work.

The three-year course of study outlined here was arranged after a consideration of the curricula prescribed in more than a score of training-schools whose standing is unquestioned. In it the aim has been to include such instruction as would be of real practical use to the nurse in dealing with disease, and to eliminate, as far as possible, superfluities and non-essentials. When one considers the small amount of time that can really be given to theoretic study in any school of nursing; the adverse conditions under which the nurse has in most instances to pursue her studies; the bodily fatigue and mental anxiety that cannot be avoided in a nurse's life, the question of how to lessen the burdens of the nurse becomes highly important. How to give her an education that will make her an efficient worker, an intelligent ally of the physician, and yet avoid loading her down with "mint and anise and cummin," to the neglect, often, of the "weightier matters," and of thorough teaching of correct practical methods, is one that demands serious consideration.

If, in the latter half of the course, she could be given the same chance that is given to medical students in some of the best colleges, to if not exactly specialize, at least to become more familiar with the line of work she wants to follow after graduation, it would be an immense improvement over the system now prevailing in certain hospitals.

No hospital can convince the public in this age that it is really giving justice to its nurses if it keeps them for a three-year training and neglects to make arrangements for an all-round course. It is certainly unjust for any hospital that claims to give a general training to neglect to make provision for its nurses to acquire midwifery experience; and the time will come when no general training will be considered complete if practical experience in nursing the insane has not been a part of the training. A system of affiliation between hospitals, whereby experience in one will be made to supplement what is lacking in the other, is possible in very many places. If a plan of interchange could be arranged between hospitals for the insane and general hospitals, whereby the nurses in both classes of institutions could gain a wider experience, it would be a decided advantage.

The nurse who has had no practical experience and training in dealing with nervous, hysteric, or insane patients is as unfitted to care for such cases efficiently as the nurse who has dealt only with such cases is to undertake to care for a typhoid-fever or pneumonia patient efficiently. The body is not a mass of disorganized units or parts, and if a nurse is to undertake to care for the whole human machine, she needs the experience with the diseases that afflict the whole machine. If the hospital claims to give a general training, it should make provision for a general experience.

Since the great majority of pupils enter the ranks of private nurses after graduation, a well-balanced curriculum would certainly provide for some special instruction and training in this branch.

Visiting nursing is another line of work that is develop-

ing, if not rapidly, at least steadily, and many hospitals now include training in visiting nursing in their course.

The very great need for competent male nurses, both in the hospital and in private nursing, coupled with the absolute inefficiency of the average hospital orderly, on whom we have been accustomed to depend for assistance in the care of male patients, has induced certain hospitals to undertake the training of male nurses, with very great advantage to the institution, besides affording opportunity for the young man to enter a remunerative occupation with little outlay of capital. Inasmuch as the young man's field is more limited as a nurse than that of the young woman; considering that he will hardly be called on to assume charge of a hospital, to become a head nurse, an operating-room nurse, to nurse children, or obstetric or gynecologic cases, it certainly seems desirable to arrange so that he will complete his course in two years. It is also highly desirable that he, especially, be given opportunity to acquire some experience and training in the care of the insane.

The nurse's life while in the hospital is likely to be depressing and to leave her with very narrow views of life unless some effort is made to combat the influences that lead to this condition. With a view to broadening her outlook on human life in general, and increasing her sympathy with infirm and unfortunate humanity, some of the best training-schools have arranged a special course of lectures dealing with charity, philanthropy, and other subjects. Quite frequently, at such times, current events and social questions are discussed. Experts in other lines of human endeavor bring of their knowledge and experience and afford glimpses of what is going on in the great world outside hospital walls.

Quite a number of hospitals carry on, throughout the greater part of the year, regular weekly Bible classes, and the custom is certainly one to be commended. If we expect nurses in their daily life to exhibit the Christian graces, to be honest, kind, charitable, to refrain from harsh judgments, to be just and true, to keep "sweet" whatever happens, it is worth while to take a half-hour occasionally to think on these things, to study how these virtues may be cultivated. These special lectures and classes are not, as a rule, compulsory. No dreaded examination will follow them, but they are distinctly helpful to the nurse, and through her, to the hospital.

The list of topics appended may afford suggestions in arranging for such a course:

1. The industrial situation in the twentieth century.
2. Defective, dependent, and delinquent members of the human family—our responsibility concerning them.
3. Municipal and State charities and their functions.
4. The twentieth century city and its charitable institutions.
5. Needy families in their homes—effective help and adequate relief.
6. Nursing legislation.
7. Where law and nursing and hospitals meet.
8. Present-day opportunities and responsibilities of the nurse.
9. The church as a factor in social progress.
10. Some significant world movements.
11. The English Bible—how to study and use it.
12. Child-saving institutions.

THE 'CURRICULUM

This course of study in the principles of nursing and allied subjects is divided into four periods—preparatory period, junior, intermediate, and senior years. Pupils will not be allowed rank in classes of higher grade until the required work in preceding classes has been completed.

PREPARATORY PERIOD

The preparatory course extends through the probation term and includes—

TEN LESSONS IN PRINCIPLES OF NURSING

1. Care of the hospital ward: routine of work, cleanliness, order, economy, sweeping, dusting, ventilation, hygiene of the ward, reception of patients.

2. Bed-making; bed-sores; general care of bed-patients; ward management.

3. Temperature: use and care of clinical thermometers; pulse and respiration.

✓ 4. Observation of symptoms; bedside records.

5. Medicines: general care and precaution, methods of administration; medicine closets; abbreviations and symbols; tables of weights and measures.

✓ 6. Baths and their uses; function of the skin; hot and cold packs.

7. The intestinal tract: enemata—purposes, mode of administration, care of appliances; suppositories; urine in health and disease; use and care of catheters; rules regarding specimens for examination.

8. Local applications: counterirritants, poultices; mode of applying heat and cold.

9. Methods of examination; preparation for examination; care of patients after operation.

10. Contagion and disinfection.

FIFTEEN LESSONS IN COOKING AND PRINCIPLES OF NUTRITION

Chemical composition of the body and of food. Sources. Classification. Uses in diet of water, protein, carbohydrates, fats, and salts. Lists of foods for tissue-building and production of heat and force. Composition of some typical foods. Uses and preparation of fluid foods and beverages. (Two demonstrations.)

Food value and preparation of semisolid or liquid and farinaceous foods.

Nutritive value of albuminous foods. Cooking of eggs with and without other foods.

Study of flesh foods. Cooking of meat and fish. (Two demonstrations.)

Broths, meat and vegetable soups, purées, etc.

Foods supplying acids and salts. Vegetables. Preparation and serving. (Two demonstrations.)

Bread, toast, sandwiches. Methods of preparation and serving.

Desserts and fruits. (Two demonstrations.)

Salads: chicken, fish, fruit, beans, lettuce, etc.

Miscellaneous dishes: dressings, sauces, croquettes of rice, etc., wafers. How to make food attractive.

TEN LESSONS IN BEDSIDE METHODS BY PRACTICAL DEMONSTRATION

1. Beds, bedding, bed-making, with and without patient, management of helpless patients, changing beds, bed-making for operative patients, rubber cushions, bed-

rests, cradles, arrangement of pillows, etc.; substitutes for hospital appliances.

2. Sweeping, dusting, preparing room for patient; disinfection of bedding, furniture, etc.; care of patient's clothing in ward and private rooms.

3. Care of linen rooms, care of bath-rooms and appliances; disinfection of excreta.

4. Baths: full, sponge, to reduce temperature, foot-baths, hot-air.

5. Administration of rectal injections for laxative, nutritive, stimulant, astringent purposes; care of appliances.

6. Vaginal douches; methods of sterilizing appliances; use and care of catheters.

7. Hot and cold applications; care of hot-water bottles; uses and care of ice-caps and coils.

8. Chart-keeping; methods of recording bedside observations.

9. Making of bandages—roller, many-tailed, plaster, abdominal, breast; some methods of applying bandages.

10. Appliances to prepare for ward examinations and dressings. Sterilization. Nurse's duties during ward dressings. Preparation and care of surgical dressings; sponges, swabs, etc.

TEN LESSONS IN THERAPEUTICS AND MATERIA MEDICA

1. Introduction.—Remedial agents in general: heat, cold, light, air, electricity, rest-cure, water, serums, transfusion, medical gymnastics, mechanotherapy. Brief description of the uses of these as remedial agents.

2. Materia Medica.—Appearance of crude drugs.

Sources and derivatives. Definitions of pharmaceutic terms. Pharmaceutic preparations.

3. Classification of Drugs.—Common illustrations of each class. Elimination of drugs.

4. Weights and Measures.—Apothecaries' weights, fluid measures, approximate measures, graduated glasses and their uses.

5. The French or Metric System.—Approximate values of old and new system. Dosage. Plan of dosage of vegetable drugs.

6. Cardiac Stimulants and Sedatives.—Principal drugs used and physiologic action.

7. Cathartics.—Drugs in common use, laxatives, simple purgatives, drastic purgatives, intestinal astringents.

8. Tonics.—Digestants, stomachics.

9. Nerve Sedatives.—Anodynes, hypnotics.

10. General Lecture.—Diuretics and diaphoretics; antiseptics and disinfectants; precautions in handling drugs; practical demonstration in preparation of seidlitz powder, carron oil, lotions, ointments, toilet powders, mouth-washes, etc.

FOUR LESSONS IN BACTERIOLOGY

1. Brief history and general theory of bacteria; bacteria in natural processes.

2. Description of most important bacteria; mode of multiplication.

3. Common communicable diseases; how infection is conveyed; immunity—natural, artificial, acquired.

4. Principles of sterilization and disinfection; principles on which aseptic surgery is based; channels by which organisms may reach wounds; hand disinfection.

NINE LESSONS IN ANATOMY AND PHYSIOLOGY

1. Chemistry of Body.—General structure; the systems of the body.
2. The Skeleton.—Composition of bone; ligaments; cartilage; joints.
3. The Muscular System.—Arrangement and structure. The levers of the body.
4. The Organs of the Thorax and Abdomen.—Their relative position and functions.
5. Waste and Repair.—The origin of tissue; the cell.
6. The Excretory System.
7. The Digestive System.—Absorption.
8. The Nervous System.
9. The Blood.—Its composition and functions; the circulatory system.

The study of anatomy and physiology will be continued at intervals throughout the entire course, the anatomy and physiology of special organs being studied in connection with the lectures on diseases of those organs.

LESSONS IN ETHICS

The superintendent will conduct classes and give instruction in ethics at frequent intervals throughout the whole course.

THREE LESSONS IN THE PREPARATION OF SOLUTIONS

1. Definitions.—Disinfectants, antiseptics, germicides, deodorants, containers, labels, most common disinfectant solutions, saturated solutions. How to ascertain quantities of drug in solutions of various strengths. Conditions that modify action of disinfectants. Corrosive sublimate: when

to use and when not to use; general strength for hand disinfection; effects on tissue. Boric-acid solution.

2. Carbolic-acid solution: how to prepare; effects on tissue; precautions; neutralization.

3. Potassium permanganate, oxalic acid, lysol, creolin, alcohol, formalin, Thiersch's solution, chlorid of lime—general characteristics and effects, how to prepare.

FIVE LESSONS IN HOUSEHOLD ECONOMY

1. House rules: relation to servants, care of rooms, furnishings, etc.

2. Marking personal and hospital clothing, preparations for laundry, amounts allowed, care of hospital linen, mending and making, disposal of worn linen.

3. Care of refrigerators, diet-kitchens, cupboards, stoves, dish towels, and utensils.

4. Tray-setting and serving of food, removal of trays and dishes, disposal of fragments.

5. The hospital diet sheets: classes of diets; amounts, care, and preservation of food; economy; cleanliness; specimen menus; special diets.

JUNIOR YEAR

Theory of Nursing, continued.

Materia Medica, continued.

Hygiene, general and personal.

Preparation of Patients for Operation—postoperative care.

Bandaging, principles and practice.

Hydrotherapy.—General principles and treatment; physiologic effects of heat and cold. External uses of water:

compresses; tepid, warm, hot, shower, medicated, bran, mercurial, sulphur, salt, soap, and Schott baths; Scotch douche, spinal sprays, etc. Internal uses of water: lavage, irrigations, enteroclysis, saline injections, hypodermoclysis, intravenous infusion.

The Urine.—The urinary organs. Symptoms of disease. Urinalysis. Common tests by practical demonstration.

Symptomatology.—Methods of observation, general and special.

INTERMEDIATE YEAR

Obstetrics.—History; anatomy of pelvis; generative organs; functions and relative position; symptoms, hygiene, and pathology of pregnancy; management of normal labor; accidents of pregnancy and labor; nurse's duties during labor; puerperal care.

Pathology of the Puerperium.—Obstetric operations; physiology and pathology of the new-born; premature infants and their care; infant feeding; obstetric nursing in hospitals, in visiting, in private homes; advice to give prospective mothers.

Massage as a therapeutic agent: details of treatment, contraindications, the various movements, practical demonstrations.

Dietetics.—Studies in foods, diet in different diseases, dietetic errors and some of their results, food containing ptomains, ptomain-poisoning.

Diseases of the Digestive Organs.—General symptoms; indigestion, general management of different forms of dyspepsia, acute gastritis, dilatation of the stomach, gastric ulcers, intestinal fermentation, autointoxication, chronic constipation, diarrhea, hemorrhoids, appendicitis.

Nursing in Infantile and Children's Diseases.—The normal infant, marasmus, catarrhal jaundice, constipation, thrush, cholera infantum, diarrhea, worms, whooping-cough, laryngitis, scrofula, rickets; hydrotherapy and massage in diseases of children.

Fevers.—Typhoid fever: seat of disease, symptoms, general care of all cases, condition of bowels, hemorrhage, perforation, tympanites, reinfection, diet, disposal of excreta, general precautions to prevent infection, complications, management of convalescence. Malarial fever. Rheumatic fever. Yellow fever.

Common Communicable Diseases.—Diphtheria, scarlet fever, measles, chicken-pox, small-pox.

Surgery and Surgical Nursing.—Operating-room technic; nurse's duties in operating-room; surgical instruments and appliances and their care; operations in private homes; wounds and their complications.

Gynecology.—Common diseases and conditions; gynecologic operations; nurse's duties; general management of cases.

SENIOR YEAR

Accidents and Emergencies.—Medical and surgical.

Alcohol.—Its use in various diseases; toxicology.

Nursing in Orthopedic Diseases.—Hip-joint disease, Pott's disease, lateral curvature of the spine, paralysis and imperfect development; management of flat foot; how to assist the orthopedic surgeon; orthopedic gymnastics.

Diseases of the Kidneys and Urinary System.—Complications and management.

Nursing in Diseases of the Heart and Circulatory System.

Nursing in Mental and Nervous Diseases.—Chorea, neurasthenia (hysteria, epilepsy, insanity).

Nursing in Diseases of the Skin.—Modern methods of treatment.

Diseases of the Eye.—Ophthalmic nursing.

Diseases of the Ear, Nose, and Throat.—Intubation, tracheotomy, postoperative care.

Diseases of the Respiratory Organs.—Special lecture on tuberculosis—causes, preventive and curative measures, general management; the world's war against tuberculosis.

General Diseases and Their Management.

Electrotherapeutics.—Thermotherapy; light-therapy; therapeutic gymnastics.

Private Nursing.

Hospital Economics.—In the senior year nurses will be expected to serve as head nurses and in other positions of special responsibility. Some special lectures will be given on the duties of head nurses, training-school administration, division of work, institutional bookkeeping, purchase of supplies, hospital government.

Text-books.—“Human Physiology,” Furneaux. “Text-book of Nursing,” Weeks or Robb, or “Practical Points in Nursing,” Stoney. “Hand-book of Materia Medica,” Groff, or “Materia Medica for Nurses,” Stoney. “Obstetrics for Nurses,” De Lee. “Nursing in the Acute Infectious Fevers,” Paul. Medical Dictionary, Dorland or Gould. “The Surgical Assistant,” Brickner. “Bacteriology in a Nutshell,” Reid, or “Bacteriology and Surgical Technic,” Stoney. “Dietetics,” Friedenwald and Ruhrah; and Pattee. “A Nurse's Hand-book of Medicine,” Henry.

ELECTIVE AND POSTGRADUATE COURSES

With a little readjustment of this curriculum, by careful planning and condensing of the subject matter of the theory of nursing and allied subjects, and by avoiding excursions into purely medical fields, the third year might easily be made elective. A two-year term, exclusive of the probation period, seems practical. Most of the lecture courses specified for the last year are short. If well arranged, these subjects could be covered in from fifteen to eighteen classes or thereabouts, which, if divided between two years, would not greatly increase the burden, providing the nurse had been given opportunity in the probation period to devote special time to foundation studies. Where a three-year term is required, if, in the third year, the emphasis could be placed on preparation for positions of responsibility in hospitals, it would be a long step forward. There is a felt need for all hospitals to give more attention to this point, and for some schools, in different parts of the country, postgraduate or otherwise, to arrange a course in hospital administration of which a nurse can avail herself if she contemplates becoming a head nurse or superintendent. A series of lectures on the duties of head nurses, their relation to the institution, its officers, physicians, patients, nurses, and to each other; the organization of ward work; the duties of orderlies, wardmaids, nurses; night supervision; operating-room supervision; duty hours for nurses; recreation hours; reports, histories; management of diet service; cleaning, etc.—such a series would make a course that would certainly prove very valuable to nurses and to the hospitals in which they might later be called to serve.

The course on hospital administration in its wider sense

should include: Methods of organization; the functions of the officers and committees of the governing body; the organization of the medical staff; its relation to the institution; the superintendent's duties and responsibilities; organization of internal working force; rules, regulations, and by-laws necessary; hospital accounting; books that should be kept in every hospital; counting the cost; statistics; purchase of drugs and surgical supplies; purchase of food supplies; hospital equipment; the laundry, cost and management; training-school management; superintendent's responsibilities, relation to nurses, faculty, other officers; acceptance of probationers; the curriculum; planning for classes; division of work; teaching methods in theory and practice; examinations; training-school records, etc. To this might be added lectures on new methods, advances in medicine, and special features of nursing, as might be decided. This course on hospital administration could be given in a well-organized hospital as well as or better than in any other institution; and there is every reason to believe that a school that gave such a course would have no dearth of applicants from the graduate nursing ranks. Nurses who now hesitate to reënter for postgraduate study because of the fact that most postgraduate courses do not differ essentially from the undergraduate courses, would many of them eagerly welcome such an opportunity. This course should not, however, be considered as included in the essentials of a nursing education, nor be required of all nurses.

CHAPTER III

The Pupils

The character of the pupils admitted for training will determine, to a large extent, the quality of the work done and the real spirit of the institution. It is quite as necessary to secure good material to train as it is to give a practical, well-rounded training. No amount of training will make a really good, conscientious, reliable nurse, unless she is a good woman to start with. To emphasize purely scholastic attainments and minimize the character test is not likely to result in good either to the hospital or to the nursing profession. However desirable it might be to lift at once the whole nursing body to the high plane of intelligence and efficiency attained by the highly educated minority, it cannot be done with one or several strokes of legislation; it cannot be accomplished in a few years. The evolution of the medical profession from the trades of the barber and the apothecary has been exceedingly gradual and slow. It is yet a long way from complete. However desirable it might be to have no candidates in training who have not had the advantage of a high-school education, it is serious business, under the present conditions that exist as regards material for training, to attempt to fix an arbitrary educational standard for the admission of candidates, especially if that standard is likely to result in decreasing the number of applicants.

The hospital school differs from all other educational

institutions in that it has assumed tremendous responsibilities. It is made responsible for the actual care of the sick twenty-four hours in every day, seven days in every week, three hundred and sixty-five days in every year. It must provide continuous service to the sick, be the patients many or few. To discharge this responsibility it must keep up a sufficient working force. If one nurse is called off duty for any reason, another must be found somewhere immediately to take up the work she has laid down. The needs are constant, pressing, and urgent. They cannot be disregarded in an attempt to carry out any theory. The typhoid-fever patients, the accident cases, the surgical and maternity patients that occupy hospital beds are not theories. If high-school pupils or graduates come and offer to care for them, all well and good. Other things being equal, they should have the preference, and have had in the past, in accepting candidates. No one questions that it would be a very good thing if every nurse had had a high-school education, or even if she held a college diploma. The same is true of people in most other lines of work. But if the high-school pupils or college students do not come and signify their willingness to help in caring for the sick, the patients must be cared for by somebody else.

In view of the statement of a social worker* who has investigated conditions that—"It is an indisputable fact that about 90 per cent. of the pupils in the public schools leave before the high-school stage. Perhaps two-thirds of this number fail to complete the grammar grades"; and of another statement made by a prominent educator, that less than 5 per cent. of the pupils in rural districts get any education other than that received in rural schools—in

* Howard Woolston, "Charities and the Commons," Sept. 1, 1906.

view of these facts it is certainly perilous to fix an arbitrary educational standard at the present time, or to limit the supply from which applications will be considered to less than 10 per cent. of the population, unless we are prepared to cease to depend on training-schools for routine nursing in hospitals. Had the high-school test been made fifteen years ago, it would have barred out many of the brightest and best nurses who have graduated from our training-schools, and the hospital world would have lost some of its most capable superintendents. Natural ability, when conditions are favorable to development, will overcome many defects, and pupils with good natural abilities are the kind that are wanted in hospitals and sick-rooms. They may not be capable of becoming teachers and supervisors of the highest grade without special educational advantages, but all nurses are not called to be teachers and supervisors.

An attempt to limit the supply of candidates by a fixed scholastic standard will not only embarrass the hospitals, but will almost certainly result in an increase in the ranks of graduates of spurious schools of nursing. A young woman who has determined to become a nurse, if she finds herself debarred from entering a hospital by the high-school test, will be very likely to try the next best, the shorter, way to secure admission to the sick-room.

With the very limited supply of candidates left to choose from after the 90 per cent. who have not had high-school training have been ruled out of consideration by legislative restrictions, a careful selection of candidates will be impossible. Even a poor nurse in a hospital counts one. She is better than nobody in a vacancy. She may not fill a place, but she "rattles around in it." Having admitted

her on the strength of a high-school diploma, unless there is a waiting list of candidates she is likely to be retained for the sole reason that no one else has offered who can be secured to fill her place. Therefore the attempt to elevate the body professional by enforcing a fixed scholastic standard at this period in our history, before the country as a whole, the homes and schools from which our pupils must come, are ready to advance, is fairly certain to end in failure.

A short practical reading course might be prescribed for candidates who seem desirable to be admitted for training. This course could form a basis for examination on entrance, and would probably help to weed out the unfit, and save them wasting time on probation preparatory to work for which they apparently were not adapted. A large number of the candidates who enter the hospital schools have had the matter under consideration for months or years before they were free to leave home or abandon other occupations to begin the study of nursing. It would certainly be a good thing for the candidates, and also for the hospitals, if the period of waiting could be used in the way that would best prepare them for the calling they have chosen. If candidates were required to have read certain specified text-books on household bacteriology and hygiene, the chemistry of cooking and cleaning, household management, elementary anatomy and physiology, elementary lessons on food and diet, they ought to be better fitted either to be good housekeepers or to begin the nursing course, and habits of study would not be so hard to form.

Such a plan is impossible until a closer coöperation and more complete agreement of hospital organizations regarding essentials of training are reached. The questions as to

how the supply of desirable candidates may be increased and the essential qualifications for admission need to be broadly considered in view of the fact that the policy pursued regarding these matters will affect the hospital at its most vital point.

CHAPTER IV

Preliminary Training

The importance of giving some measure of training and instruction to probationers before they are allowed to assume responsibilities for bedside work is now pretty generally recognized in the hospital world. How, where, and how much of this instruction should be given are points on which a considerable diversity of opinion still exists. When a general attempt was first made to put the plan in operation, the idea of a school entirely independent of hospitals to which prospective nurse candidates might go to receive preliminary training was advocated and tried with varying degrees of success or failure. Comparatively few candidates cared to spend months of time and considerable money in preliminary training while still in doubt as to their general qualifications for the work. Inasmuch as the fundamental question as to the essentials for a nursing education was still undecided, it was but a natural consequence that extremes of opinion should exist regarding what nurses should be taught during this preparatory period, and how long should be spent in preparation. Some schools modestly started by giving one month of preliminary instruction. Others attempted to teach the real essentials for the probationer in three months, while others required six months. One school taught its probationers to polish silver and scrub kitchen tables and shelves, and then apparently led them, by swiftly progress-

ive steps, until they reached the dissecting-room, where they were taught to dissect dogs, cats, and other specimens. They also were initiated into the practical work of a pharmacist. According to the published statement of one who had taken the course, "The probationers go to the pharmacy, where, under instruction by a graduate pharmacist, they prepare the drugs, make tablets, pills, powders, filter medicines, etc."

Is this really elevating the standards of nursing? May we not believe that it is such extremes as these in methods that have been reached in training nurses that have helped to create the feeling that has been gaining in strength that nurses are being "overtrained"? Inasmuch as no agreement as to what constitutes a well-rounded training has been reached it is hard to agree as to the point when "overtraining" begins; but the wisdom of introducing nurses to the dissecting-room, or of teaching them in the probationary period to make pills and prepare drugs, is a point that may well be questioned. Whether it ever can be of any practical value to the average nurse to have dissected dogs and cats, what real advantage is likely to follow such experience, are other points on which there might be a wide difference of opinion.

In a great many of the best schools an excellent, thoroughly practical, three or four months' course of preliminary training has been given for several years with very gratifying results. Methods of practical nursing and such theory as they would need to enable them to discharge intelligently the duties they would have when they entered the wards have been taught—a very great advance on the old system under which nurses had to do a great many things in a meaningless, mechanic way, without in the least

understanding why they were required or what results might be expected.

The methods pursued in different details have, of course, to be modified to suit local conditions, but the following description of the plans adopted in one school may be suggestive: The candidates are notified to arrive on the same day—all that are likely to be admitted until the next preparatory term begins. As far as possible each candidate is personally interviewed by the superintendent, either before entrance or soon after. Her mental measurements, attitude, and probable adaptability are gaged. After the class has assembled, the superintendent meets them for a few preliminary lectures. The aims and objects of the institution are put before them. They are told of the responsibilities of the work, and of the qualities essential for it. The real meaning of nursing, the spirit in which the patients must be dealt with, the functions of the different house officers, are made plain, and the house rules are read and explained. The necessity of obedience, of cultivating one's observing powers, of tact, of discretion of speech, of cultivating habits of reticence, of being respectful, faithful, punctual, teachable, and of paying attention to what is said, are dwelt on and emphasized. Every pupil starts out fairly, with a general knowledge of what is expected of her during her probation. The course of instruction is similar to the one outlined in previous pages. Then the class is turned over to the supervising nurse for the first practical demonstration—usually, bed-making. These clinical demonstrations are given as frequently as opportunity affords during the first few weeks. When a patient vacates a room, the class is taken to that room and taught how to disinfect bedding, mattress, etc., how to

fumigate and put the room in order. In all these practical lessons the minutest details are included. The chapters in the text-books on bed-making and the care of rooms are given them for study previous to the demonstrations. The care of linen rooms and bath-rooms and sweeping and dusting are taught early in the course, and as soon as may be, after a trial of skill, the pupils are expected to assist in these duties.

The class is divided into groups for practical work. Six hours of daily duty, divided usually into periods of two to three hours, in the hospital are required after a certain number of classes and demonstrations have been held. In a class of twelve two may be assigned to linen room and bath-room duty on two floors, two to diet-kitchen duty, tray-setting, and assisting in serving on two floors, two are under the direction of the chief surgical nurse and assist in making bandages and dressings after such duties have been explained and demonstrated, and two are taken into the wards and given personal instruction in methods of giving baths and treatments. The group on treatments are allowed to assist the ward nurses in giving baths, rubbing backs of convalescents, combing hair, and making beds. They are expected to practise bandaging on each other. Massage demonstrations are given to the class, and opportunity is given to practise on convalescent ward patients, as physicians may desire. There is a regular rotation of service in each of the duties, so that in three months a pupil has a fair working knowledge of the methods used by the institution. In the third month each nurse is given the responsibility of the nursing of one or two or more patients, in a ward, under careful supervision. Monthly written examinations are held, and usually each pupil is expected,

during probation, to write a short paper on some phase of nursing, as a test of her ability to observe and formulate her ideas and express them in writing. Instruction is given as to how to prepare their examination papers, how to mark charts and keep records—in fact, as far as it is possible to do so, the attempt is made to prepare a nurse for the practical duties for which she will be responsible. Daily classes are held, and a certain number of hours of study every day required. As compared with the old system, the results that are most in evidence are: more exactness in nursing; the cultivation of habits of study at the very beginning of the course; uniformity of method; and altogether more satisfactory service. The new plan of training costs more in time and energy on the part of instructors, but the knowledge that the pupils are taught right methods, that they understand how to do the things required, the setting of high standards of practice in the beginning, the quality of thoroughness that shows throughout all their work, more than counterbalances the additional labor required.

CHAPTER V

The Art of Teaching

The graduate nurse who finds herself for the first time before a class in the capacity of teacher has usually some feeling of embarrassment. She may feel confident that she knows how to nurse, that she is able to care for a patient afflicted with any ordinary, or extraordinary, disease, but such knowledge does not always spell power when in the presence of a class. It does not always give confidence in an attempt to give theoretic instruction, to direct the pupil's studies, and to do the work of a teacher. If she has had previous training in the art of teaching as a public school teacher, she may experience less difficulty in deciding how to take hold of a subject.

In an attempt to secure practical suggestions that might be of use under such conditions the works and methods of a score or more of experienced educators, both in the hospital and general educational field, have been searched, and studied with a view to getting some light on methods of teaching that could be used to advantage in a hospital training-school. The first point to be emphasized is that every teacher of any subject should have some method in giving instruction—that the method of teaching should be studied as well as the matter. How shall I teach this lesson? What general plan shall I use? What illustrations are available? Shall I begin with a question? If so, what question? Shall I begin with a statement? If

so, what statement? What are the important points to be dwelt on? What are the main points to be brought out? How can this lesson be taught so as to be of the most benefit to the class? How shall I close? What help can I give them in preparing for the next lesson? These are questions to be asked and answered before every lecture or recitation. There is sound wisdom in having an end in view from the beginning and knowing how to reach it.

METHODS OF INSTRUCTION

The management of a training-school deals with its organization, the selection of its officers, its faculty, the arrangement of its curriculum, and with the correlation of all educational factors.

Method deals with the principle upon which good teaching must be based, and with the means of making each subject in the curriculum produce the best educational results. How much teaching or how little each superintendent or head nurse shall do is a matter to be decided by each school and regulated largely by the extent of the demands made on the superintendent as an executive officer. No one knows so well as a superintendent, who is a nurse, what instruction the nurses should have, and for that reason she should make it a point to attend at least some lectures in every course, until she is satisfied that the nurses are getting out of the lectures what they ought to get. It by no means follows that, because a man is connected with two or three hospitals and a medical school, he will give a satisfactory course of lectures to nurses. The fact that he is in such demand is often a good reason for not depending on him. Some lesser light would in all

probability give more time to preparation and take more interest. Many schools have been crippled by depending on men who were too busy to attend to the work they allowed themselves to be advertised as doing. Judged by the benefit received by nurses, many courses of lectures advertised in the annual announcements have been brilliant fizzles.

In arranging a course of study great care should be taken to arrange it so that the work of the first year shall prepare the nurse for that which is to follow, that it begins with the fundamental general principles, and passes by natural order of progression to the special subjects. Too little attention has been paid to proper grading of instruction in nurses' training-schools, and as a result nurses are constantly doing things the importance and reason for which are not understood.

At least five methods of instruction may be used to advantage in a hospital training-school in addition to regular bedside instruction.

Instruction by recitation, in which the pupil prepares herself by careful study of a prescribed section of a text-book.

Laboratory exercise, in which the pupils perform for themselves various experiments under the supervision of teachers.

Practical demonstration, in which the teacher performs for the whole class certain experiments during the process of demonstration.

Illustrated lecture, which may supplement the standard text-books or be entirely independent of any text-book, in which charts, blackboard, and all aids to teaching are freely used.

Conferences in which announced topics are informally discussed by teacher and pupils.

The two great coördinate aims of education are that people may acquire knowledge and develop power, and any method which helps in the attainment of these objects should be employed.

“Teaching is simply helping the mind to perform its function of knowing and growing.”

“Teaching, in its simplest sense, is the communication of knowledge, the painting in another’s mind the mental picture in one’s own mind, the shaping of a pupil’s thought and understanding to the comprehension of some truth—the making it common to the two.”

“Teaching is arousing and using the pupil’s mind to form in it a desired conception or thought.”

“Learning is thinking into one’s own understanding a new idea or truth.”

ESSENTIALS OF TEACHING

Teaching implies the existence of two factors, one imparting, the other receiving, instruction. Professor Hart, in making a distinction between the hearing of recitations and the real teaching process, says: “A pupil recites lessons when it repeats something previously learned. A pupil is taught when it learns something not known before. The two things often indeed go together, but they are in themselves essentially distinct. Teaching is causing another to know.”

If we accept this definition of teaching, we are forced to admit that much that passes for teaching is really not teaching. It is merely the repetition of facts or theories.

If these are not learned or grasped by the student, then no teaching has taken place, for teaching includes the two-fold process of imparting instruction and learning. Neither part alone constitutes teaching.

Four things are necessary to intelligent teaching: The teacher must know the pupils—their individual needs and attainments; she must know what she is to teach; she must know how to teach it; and there must be a common language. The pupil must understand the words employed if learning is to take place. "The mind grows on what it assimilates," and for this reason it is essential for the teacher to test the pupil's knowledge and measure her ability before beginning the teaching process. This is perhaps more necessary in nurses' training-schools than in many other departments of education, since in such schools are found pupils of very variable attainments. The young woman who never saw the inside of a high school and who had not attempted study for ten years before entering the hospital is put side by side with the college graduate who has all her life been a student. Natural ability will often overcome the lack of early education, but if they are to be graduated equally proficient, there must be some individual attention and direction as to methods of study. Individual defects should be noted and emphasized with a view to their correction. Poor penmanship and bad spelling are not insuperable difficulties, but they are decided disadvantages to a nurse and should not be deemed unworthy of notice.

In addition to the teacher of nursing knowing what she is to teach, she must know whom she is to teach—not merely their names and how long they have been in the school, but their individual capacities, attainments, and

needs, their habits of thought, characteristics, and tendencies. Taking things for granted is a common failing, and rarely justifiable. There is next to nothing of importance in the study of nursing, the knowledge of which it is safe to assume is possessed by the pupils until the actual test has been made. So as long as a nurse is supposed to know what she does not know, it will be impossible to cause her to understand clearly any fact in the regions beyond where this primary knowledge is essential. No intelligent physician would administer a prescription until he had studied the patient's needs. No wise teacher will attempt to plant knowledge in a pupil's mind until she has found that the pupil is ready to digest and assimilate it.

SECURING THE PUPIL'S COÖPERATION

The manner in which the lectures and recitations are conducted will have much to do in holding the attention of a class. To know how to make the subject matter stimulate the pupil's mind to activity so that she will get possession of the desired lesson is one of the teacher's problems. This is a subject that needs always to be studied in advance. If successful mental work is expected of nurses, there should be an effective arrangement of the matter for them, going over the assigned portion of the text-book and emphasizing the important points, giving suggestions as to how to study. This is especially necessary with beginners.

The necessity of careful grading of subjects has been mentioned, so that one step taken will prepare them for the next. Especially is this important in the junior year, when so many new ideas are crowding in upon the nurse and causing confusion of mind. Specific direction from

one who knows the ground thoroughly will save them from a waste of time, and anything that will save them from a waste of time and energy is a help to them. Mere memory work is not the only thing desired. The object of all teaching is the cultivation of intelligence in their particular branch, sound character, and the ability to apply their knowledge to practical conditions.

THE RECITATION

One of the primary objects of a recitation is to find out what the pupil knows and how she knows it. She may have memorized the exact words of the text-book and yet utterly have failed to comprehend the meaning of the subject matter. Another object is to find out what the nurse does not know about the assigned lesson, and to aid her to a clear interpretation of the lesson.

A fourth object is to explain difficulties upon which the class or any member of it may have exhausted their efforts. It is well to make it a general rule never to explain a point until the whole class has done its best upon it.

A fifth purpose of the recitation is the development of the pupil's powers of original expression.

The whole recitation should be conducted for the benefit of the class, and pupils should be expected to recite to the class rather than to the teacher. The manner of the teacher should show alert interest, self-possession, and mastery of the subject of the lesson. No teacher should complain if she does not get attention or active interest from a class if she has not put vim, quickness, and force into it.

THE ART OF QUESTIONING

There are several distinct ends to be gained by proper questioning: stimulation of pupil's mind; test of pupil's knowledge of a subject; deepening of interest in a subject; and bringing out its important aspects and making them clear.

In order to secure interest from the whole class no pupil should know when she is to be questioned. The question should be asked before the pupil's name is called. If the teacher says "Miss Jones, will you please tell us in how many ways medicines may be administered?" the attention of the whole class will be relaxed as soon as Miss Jones' name is called, and they may fail to apply the question to themselves. If the teacher had said, "Will you please tell us in how many ways medicine may be given, Miss Jones?" each pupil would take in the full force of the question, not knowing but she would be called on to answer.

Prompt questioning on the part of the teacher and prompt answers will help greatly in holding the attention of a class in the driest subject.

There are certain kinds of questions to be avoided in all teaching, as, for instance, categorical questions which require only yes or no for an answer, as, "Is a low temperature more serious than a high one?"

Another form of question to be avoided is the elliptic form, as, "The three vital signs are ———"

A third form of question to be avoided is the suggestive form, as, "Mustard is one of the common rubefacients, isn't it?"

Questions should be clear cut and free from ambiguity—not haphazard, ill digested, hesitating, or rambling. It is a good thing for each teacher to make her own questions,

suggested by observation in class and intercourse with pupils, rather than use ready-made questions, though ready-made questions are often helpful and suggestive.

Time spent in advance on questions is time well spent. Even old experienced teachers think them over carefully and often write them out. This latter plan helps as a guide to thought, phrasing, and in planning how to teach.

THE REVIEW

The primary object of a review is not to prepare a nurse for examination by a stuffing or cramming process. A well-conducted review is a test of thoroughness. It shows the pupil's weakness and strength, their gains, their deficiencies, to themselves as well as to the teacher. A thorough review should result in correcting, completing, connecting, and fixing into permanent form the matter studied. This testing work should go on in connection with the whole teaching process. Reviews should be frequent. A few well-planned questions at the beginning of a lesson, bringing out the most important phases of the previous lesson and a few at the close, briefly touching on the main points just brought out, will help to fix the matter in the nurse's mind and make stated examinations less formidable affairs. It should be, in reality, a reviewing, rethinking, reknowing, and reproducing of the matter that has been assigned for study.

THE EXAMINATION

The objects of an examination are usually to test the fitness of the candidate to continue the course or to lay aside the work as completed or to determine their fitness for more advanced work. The test, to be of value, should

be a test of all the powers of mind and body that have been in training—not mere memory work. Both oral and written tests should be used. The direct value of the written method is that it gives an opportunity for careful thought and preparation before answering. The indirect value is that it cultivates powers of expressing ideas in proper form. Its disadvantages are that it requires good powers of composition, which is a separate gift and is apt to be discouraging to pupils who are weak at this point.

The lecture system in teaching takes it for granted that each pupil is ready and able to make an intelligent effort at acquiring the knowledge given out by the lecturer. The taking of notes is an important part. The submitting of these notes for inspection and correction is fully as important. Its real value in a nurses' training-school is a question on which there is a wide difference of opinion. A rambling lecture, lacking plan in the lecturer's mind, cannot produce any important results in a nurse's education. Many nurses are not experts at seeing the important points and getting them down quickly. In medical schools there has been a decided change in methods of instruction in recent years. More reliance is being placed on study from text-books and the recitation plan, and less on the professor's lectures. A distinct gain will be found in a nurses' school when the text-book plan is more generally used in all the fundamental branches. Special lectures on subjects not generally included in text-books may be found helpful in the final year of training.

The nurses should be encouraged to interleave their text-books, to take copious notes, to underline, and to use the margin freely in their studies. The portions of the text-book which contain the lesson to be studied should be plainly indicated, and the important points emphasized.

CHAPTER VI

Examinations

Examinations are generally admitted to be necessary in all educational institutions, even though there are times when one might feel justified, in a hospital, in classing them among the "necessary evils" of life. If the questions were asked, "What is your object in arranging for this examination of this class of nurses? What do you expect to accomplish by it?" the answer would probably be, "It is a test of the fitness of the nurse to go on with the course, or of her general proficiency, or of her ability to undertake more difficult work, or to determine wherein she is weak or deficient." However valuable or satisfactory the written test may be in ordinary educational institutions, it is certainly far from being the best test in a hospital training-school. A nurse might be able to write perfectly the theory of bed-making, and yet never keep the beds in her ward looking neat and trim. Like the professor at the skating-rink, she might be "up in theory, but down in practice." She might know all the methods of preventing bed-sores, and yet neglect to watch for their approach. She might be thoroughly versed in the rules for the administration of medicines, and yet be very careless in handling them. She might know all the facts that are known about sepsis and asepsis, and yet be a very indifferent surgical or obstetric nurse.

That a nurse should be able to cram her mind with the

facts concerning any subject, and take a high grade in theory, is of far less importance than that she should have proved herself strong and careful in the daily routine. The real work is a far more valuable test than the telling of it. The nurse's improvement in it, and the result of frequent reviews, is a truer test than any written examination, however thoroughly and fairly conducted. What the nurses can do, how steadily and resourcefully they can meet emergencies and manage difficult situations, their ability to get on with disagreeable people, their every-day faithfulness and accuracy, are of far more value in determining their fitness to hold a diploma than their telling or writing what they would do under certain circumstances could possibly be. Perhaps the greatest value of the written examination is the fixing of the subject in the pupil's mind and the discovery of weak points. This latter is often only an inability to express the knowledge possessed in proper form. The greatest benefit of examinations is only realized when the ground covered in examinations is thoroughly reviewed in class. Then the character and value and weak points of the answers can be clearly shown.

The proper fair grading of a paper, the fixing of the value of each answer, or part of an answer, is not an easy matter. Before attempting to grade a paper, an examiner should have some general system of weighing an answer and determining its value.

THE ANSWERS

What are the elements of a good answer? An answer to be called good must, first of all, show thought. Random, haphazard answers deserve little credit even if

they almost hit the mark. A good answer will show clearness of expression. Ambiguity will be guarded against. In a good answer all that is asked will be given, but nothing more. A good answer will bear the mark of a correct interpretation of the question; this results from giving careful thought to each question before attempting to answer it. The reason for failure at this point can often be traced to the fact that the student did not take time properly to grasp the point. Good arrangement always characterizes a good answer. Many answers admit of clear, methodic arrangement. It is the student's business to see these opportunities and use them. A good answer will give evidence of a proper appreciation of time, space, and words, and economy will be exercised in the use of all three. It is a common failing to give more than is asked for, because the student cannot give enough of what is demanded. While this failing should be discouraged, it is unfair to reject as worthless any answer that contains even a small fraction of truth. Partial answers deserve partial credit. To sum up: The good answer must show thought, clearness of expression, correct interpretation, good arrangement, economy of time, space, and language. The answers that deserve no credit are those which show flippancy, thoughtless haste, guesses, and incorrect ideas concerning the subject.

GENERAL RULES



With each class some instruction as to how to arrange their answers, how and where to affix their signatures, how to fold papers—general rules—must be given. These instructions might read similar to the following:

Candidates will write on one side of the paper only.

The number of the question and not the question itself must be given.

Questions need not be answered in the exact order in which they are written, but must be numbered exactly as in the question paper, each subdivision being correctly indicated.

A line must be left between each question. Subdivisions must always be started on a new line. An inch space must be left at the left side of the paper.

New questions must not be started at the bottom of the page.

Each page must be numbered in the right-hand corner.

Papers must be folded lengthwise.

Candidates will please be prompt in reporting for examination and will bring with them pen, ink, blotter, and eraser.

PREPARATION OF PAPERS

The preparation of short papers on nursing subjects at frequent intervals during the training period is a great help to habits of study as well as to clearness of expression.

The following hints on how to prepare a paper have been used in getting nurses started in such work:

In preparing a paper first think your subject through carefully and decide the main points you think should be touched on. Write those out in the order in which you intend to treat them. Then make a skeleton, something on this order:

Title—Surgical Cleanliness.

Theme—Methods of Securing Cleanliness.

Introduction—The Germ Theory.

Development—

Conclusion—

The introduction should be comparatively short. The main part of the paper should be given to the development of the subject. The conclusion should usually be either a climax of ideas in the order of their importance or a general summing-up of the main points of the paper.

Write first a rough copy. Then let it rest a day or two or longer, and go through it and correct it before rewriting it. Criticize it ruthlessly. Notice spelling and punctuation. Arrange your paragraphs carefully. Short, disjointed paragraphs are to be avoided. As a general rule, each paragraph deals with a different aspect of the subject. Study to express yourself clearly. Avoid long sentences. Short sentences are clearer, more emphatic, less apt to be ambiguous. Aim to make each paper better than the last. Give most emphasis to important points. Study the little details which combine to make perfection. It is not sufficient to know all about a subject unless you can express clearly and in proper order what you know. When asked to write a paper, essay, or thesis, always keep it on separate paper from the main part of the examination. In the finished paper the divisions of the skeleton should not appear, but the paper should bear analysis according to these rules.

TRAINING-SCHOOL RECORD

Candidate's name..... Date of entrance..... Probation ended....
 Address Age Religion.....
 Friend's address..... Date of graduation.....

	1ST YEAR.	2D YEAR.	3D YEAR.	AVERAGES.	REMARKS.
Deportment.....					
Health.....				Practical	
Order and cleanliness..				work ...	
Theory of nursing.....					
Hygiene.....				1st year ...	
Anatomy.....					
Physiology.....					
Dietetics.....				2d year ...	
Bacteriology.....					
Cooking.....					
Bandaging.....				3d year ...	
Surgical nursing.....					
Gynecology.....				Theory ...	
Obstetrics.....					
Materia medica.....					
Diseases of the nervous system.....					
Diseases of the eye, ear, nose, and throat ...				1st year ..	
Contagious diseases ...					
Children's diseases....				2d year ...	
Emergencies					
Diseases of the skin...					
General medical nurs- ing.....					
Urinalysis.....				Total	
Massage.....				average .	
Executive ability.....					

CHAPTER VII

Fundamental Principles

At the very beginning of the nursing course it is wise to take time to teach fundamental principles thoroughly. Once these are grasped, everything else is more easily understood. The nurse's relation to the physician and to the patient should be clearly put before her. Instead of clinging to that old idea that may, in Sairy Gamp days, have been necessary, that may still be necessary in military circles, and that, unfortunately, is quoted by a few physicians today as illustrating the proper attitude of the nurse in relation to the care of the sick—

“Yours not to reason why,
Yours not to make reply,
Yours but to do or die”—

is it not well to try to teach her from the very beginning “to reason why,” “to make reply,” until she clearly understands what she is expected to do, what object the physician has in view in giving certain orders, what results he expects?

Inasmuch as the average young woman has very chaotic ideas of what nursing really is, and usually associates it with a great deal of dosing and running to and fro in waiting on the sick, it has been found wise to start out with a plain simple talk on what nursing is, what it involves, what it requires. If this is followed by another talk in the simplest possible language regarding what disease is; what some

of the main causes are, such as unwise or excessive feeding, irregular habits, bad air, want of cleanliness, or any violation of nature's laws; how such conditions are corrected; what the physician's part, the nurse's part, and nature's part is in the healing process—the nurse will speedily find her conceptions of the business she has undertaken enlarged.

Remembering the great variety of perplexing questions that came to her in her early days as a nurse, when nursing literature was scant and systematic instruction according to a prearranged plan was practically unknown, the author has endeavored in dealing with her own classes to put before them at the beginning some of the general principles relating to the relief of human ills that ought to be understood by every intelligent person, but which, even in this age of enlightenment, are too little appreciated. The following general principles are cited, not as examples of the best way to arrange such a preliminary talk so as to prepare the class for the duties and for the instruction that will follow, but simply as suggestions that may be helpful to those who use this method for the first time.

In any disease intelligent treatment requires that the history of the disease be known and also the history of the patient previous to the attack. The present condition, not only of the affected part, but of the entire organism, should be ascertained as fully as possible. The manifestation of disease in one organ may be the result of disease of some organ near or remote, and while it is not always possible to discover the cause, it is, in the majority of cases, and the best results are obtainable when the cause is known. The work of diagnosis does not come in the province of a nurse, but she can render great assistance in that most

important and difficult part of medical practice by intelligent observation and knowledge of the principles underlying the treatment of disease in general.

One of the first principles of treatment is the removal of the cause of disease if possible. If the disturbance be due to impure air, secure pure air; if to unwholesome food, remove the cause of irritation from the system and cut off the supply; if to excessive heat, apply cold. Even in nervous cases, where the cause is often imaginary, it may be removed by diverting the attention to some other subject and surrounding the patient with wholesome mental influences.

A second principle of treatment is to administer no remedy unless it is plainly demanded. Indiscriminate dosing and drugging do harm oftener than good. Frequently, when the patient needs more than anything else an enema to relieve constipation and a good brisk walk in the open air, various powders and pills, the contents of which are unknown, are taken for the headache that would have subsided had the functions been properly regulated.

A third principle is to refrain from administering a remedy without a clear idea of the benefit to be derived from it. Haphazard treatment in the hope that if it does no good it will do no harm usually results in doing harm. If no other harm is done it is an unnecessary drain on the vitality of the patient. Palliative treatment is often needed in obscure conditions where the real cause and nature of the disease are undetermined, but until a skilful physician has charge of the case, only the simplest measures for the relief of pain should be attempted. A certain class of people are prone to assume, without a knowledge of the conditions or demands of the case, that neglect only is

dangerous. This error, unfortunately, is not confined to the laity, and many physicians (happily the type is rapidly becoming extinct) torture the sufferer with new combinations of drugs every day or oftener. Half a dozen different drugs at a time are poured into them, these in a few hours reinforced by others, then abandoned and something else tried. Anything seems desirable except to let the patient alone for a time and give exhausted nature an opportunity to reassert her power to heal.

Another very important principle which should govern all who have to do with the care and treatment of the sick is to study the process of nature and endeavor to work harmoniously with her. In any form of treatment the immediate action and the remote influences of the remedy should be watched. "Nature is at work endeavoring to free herself from obstruction, to remove noxious elements from the system, or in some way to remove existing causes of derangement and restore harmony to the vital processes; but nature works blindly, she is not intelligent, and often destroys herself in the effort of self-preservation by too great intensity of action. Hence when the morbid process is becoming too intense it should be checked by the employment of well-known means for lessening vital action. The effort should always be made to restore as far as possible the balance of vital activity in the different parts of the system, which balance is always destroyed whenever a part or the whole of the system is in a state of disease" (Kellogg).

Another principle is to economize and conserve in every possible way the vital powers of the patient. Depression and overstimulation are both to be avoided. The choice of remedies is made of those which will accomplish

the result desired with the least tax on the vital forces. If there is doubt that the remedy will weaken by decreasing the vitality more than it will help by arresting the abnormal process, it is safer to omit it and trust to nature's methods.

The last principle of treatment that need be mentioned here is—in all cases nurse the patient, not the disease. This is perhaps the most important for nurses to remember. It is a common error with the laity, and some others besides, to administer some medicine that some one has said will cure the disease, and leave the patient and his peculiar condition out of consideration or to go through a routine as if all patients were alike.

REMEDIAL AGENTS

In considering remedial agents Kellogg says it is important to remember that the benefit derived is not through the action of the agent upon the system, but through the action of the living tissue upon it. Food nourishes the body, but throughout the whole process of nutrition food is a passive agent, subject to the action of the living tissue. The same may be said of water and air. So in remedial agencies the medicinal property possessed by the agent is simply an expression of the manner in which the system receives it, and not the action of the remedy itself. A certain expenditure of vitality is involved in the use of all remedial agents, and the most desirable are those which will give the most assistance to nature's efforts with the least drain on the vitality.

Within the last decade there has been an increasing tendency to use as remedial agents those which are essential to maintaining life and health under all conditions.

In this class of remedies would be included water, air, light, heat, electricity, proper diet, exercise, and proper mental influences. These natural agents are friendly to the vital functions, are in harmony with nature's processes, and in many cases the regulation of the natural action of these agents is all that is needed to restore health.

After years of experience in trying to arrange a satisfactory course of lectures on materia medica and therapeutics for probationers and nurses in their junior year; after finding often at the end of the course that the nurses had the most confused and chaotic ideas of the subject, owing to the lecturer's excursions through these broad fields, a careful outline was made of the points that should be given to the class before attempting to study the doses and action of drugs. The following introductory lecture on the subject was prepared at the author's request, and in conformity with such outline, and delivered by Dr. William Shields to the nurses of Columbia Hospital, Pittsburgh. It proved exceedingly helpful in getting before the class, at the beginning of the course, a clear, concise, and comprehensive idea as to the great variety of remedial agents that are in general use, and with which they, as nurses, should become familiar. Through the courtesy of Dr. Shields we are enabled to give the lecture in full:

"In the treatment of disease we make use of various agencies which we call remedies. In the selection of these remedies we are permitted to avail ourselves of every possible means for the prevention, cure, repair, or alleviation of bodily ailments.

"We shall be limited in the study of materia medica mainly to the consideration of that class of remedies called drugs, yet it is proper for us here to take a comprehensive

review of all the sources from which we derive remedial agents.

“When we look at a list of all the remedies at our disposal for the treatment of disease, we find them almost as numerous as the diseases themselves. But for purposes of study we find that the entire list may be placed in comparatively few classes.

“Proceeding as nearly as possible in a logical order, we class remedial agents in the order of their relative importance. The old and trite saying that ‘An ounce of prevention is worth a pound of cure’ is nevertheless true. If the healing of disease be fraught with great blessing to humanity, how much greater must be any measure which guards human life from disease and injury.

“Herbert Spencer, in his essay on education, in answer to the question, ‘What knowledge is of most worth?’ said: ‘As vigorous health and its accompanying high spirits are larger elements of happiness than any other thing whatsoever, the teaching how to maintain them is a teaching that should yield in moment to no other whatever.’

“PROPHYLACTIC REMEDIES

“Hence we appropriately place at the beginning prophylactic remedies—those which have for their purpose the prevention of disease. Chief among these are sanitary or hygienic measures; the improvement of man’s environment with reference to his air, food, exercise, water-supply, arrangement of dwellings, etc.

“Much of the regulation of these outside influences is the work of public boards of health.

“When applied to the individual, these measures pre-

suppose a knowledge on the part of the physician or nurse of the physiologic laws of the body and an acquaintance with the effects of food, clothing, climate, exercise, occupation, habits of life, etc., upon each particular body.

“Under this class we allude to dieting, bathing, ventilation, change of residence, change of occupation, regulation of habits, especially those of breathing and dieting.

“Dieting refers to the regulation, restriction, or selection of food, both in health and disease, together with a proper knowledge of the right methods of preparing the foods to suit the individual.

“Bathing is a very important preventive of disease, as well as a valuable aid at times in the treatment and cure of abnormal states of the system. So important, indeed, is the use of water in the form of baths that many establishments exist in this and other countries for the treatment alone of various acute and chronic diseases by means of water. As examples, in this country we are familiar with Cambridge Springs, Mt. Clemens, Clifton Springs, Saratoga, and the Hot Springs of Arkansas; Carlsbad, Wiesbaden, Kissingen, and others abroad. As nurses, you will have daily recourse to the use of bathing in one form or another, from simple sponging to the plunge or tubbing of patients, hot or cold shower-bathing, etc.

“The use of water in the treatment of disease is as ancient as the world, and it forms a most important part of the literature of medicine in all ages.

“Ventilation regulates the supply and quality of air in the living rooms and is also a means of modifying many disease processes, so as to hasten or facilitate recovery.

“Breathing—proper method.

“Climate. By this we refer to the character of a locality

as regards the prevalent atmospheric conditions, its temperature, moisture or dryness, purity or contamination, electric conditions, and other qualities. These atmospheric conditions are largely influenced or modified by the presence or absence of mountains, forests, lakes, rivers, also by altitude, latitude, proximity to the seashore, and the effects of trade-winds and ocean currents.

“All these conditions may be utilized for their sanitary or physiologic influence upon the human body, both in health and disease. These represent perhaps the most important of the prophylactic remedies and are very often called upon alone or in connection with other remedies or medicines in the treatment of disease. Thus we find that to properly regulate the ventilation and temperature of the sick-room, to direct the bathing and diet of the patient, and to decide whether he shall have rest or exercise, is of as great importance oftentimes in facilitating the recovery as the nicely adjusted prescription.

“IMPONDERABLE REMEDIES

“We next consider a class of remedies which, because they are invisible and practically without weight, we call imponderable remedies.

“Among these are light, heat, cold, electricity, magnetism, etc. These exist or have their source in the phenomena of nature, and when wisely applied, either alone or in modified states, are capable of powerfully influencing the bodily functions, both as sanitary and curative agents.

“Thus we apply heat to the entire surface of the body for its stimulating or restorative effect upon the circulation or secretions, or we may apply it locally in circumscribed

areas to allay pain or restore activity to some injured part. Hot-air machines which produce a high degree of dry heat are now quite generally in use in hospitals.

“Cold likewise is valuable as a remedial agent in arresting the progress of inflammation; thus we apply ice poultices to an abscess or over the abdomen in peritonitis or appendicitis. Cold is of great value sometimes in arresting the flow of blood and in reducing high temperatures.

“Light is also a useful agent in the treatment of some forms of disease. Direct rays of the sun are oftentimes essential to the restoring of healthy color and vigor in weak or anemic patients. These rays may be modified or separated by means of prisms so as to obtain certain individual rays, which seem to exert special curative influence upon disease of a local nature. Along this same line we have certain electric rays of a powerfully penetrating character, such as the well known x -rays of Röntgen, which are now used with more or less success in treating cancer, lupus, and many other skin diseases. The x -ray is also used for facilitating exact diagnosis of fractures. These rays have the quality of penetrating the soft tissues of the body, and may often be an invaluable aid to the surgeon in locating foreign bodies, such as bullets, etc., which call for removal by surgical operation.

“Electricity in the form of direct or indirect currents, magnetism, galvanism, is constantly being used with much apparent success as a curative agent, especially in connection with massage, of which you will learn later.

“We now come to another class called mechanic remedies.

“MECHANIC REMEDIES

“This covers the domain of surgery and certain mechanic and surgical procedures, such as acupuncture, or bleeding into the tissues of the body by means of a needle puncture.

“Acupressure—compression of a blood-vessel under the surface by inserting a needle over it. (Not much used at present.)

“Bandaging, as to support a fracture or a sprain, or to retain other dressings in place.

“Blood-letting, as by opening a vein, applying leeches, wet-cupping, etc. (Not much used.)

“Finally, various forms of massage, gymnastics, Swedish movements, active and passive motion, mechanic vibration.

“Massage is the term applied to one of the most important of the mechanic methods of treating disease.

“It consists of certain manipulations of the soft tissues of the body with a view to bringing about physiologic changes and improvement in general nutrition of the parts. In other words, it constitutes a practical substitute for exercise in persons who, by reason of disease or other infirmity, are prohibited voluntary exercise. The practice of massage, both in health and for remedial purposes, is a very ancient one, and has been used in all ages and among all races. It is a most valuable ally in the treatment of many diseases—so general have its uses been that one enthusiast by the name of Still, of Missouri, about twenty-five years ago, conceived the notion that 95 per cent. of all diseases were dependent upon certain conditions of the bones, spine, etc., which could be readily cured by means

of massage and various manipulations of these parts. So he established the so-called school of osteopathy.

“The fallacy of this idea lies in the fact that there can be no system of remedies which will apply to all diseases, except that system which recognizes the whole wide realms of nature, art, mechanics, man’s ingenuity, and God over all, as the sources whence to obtain the remedies. No other system is logical or adequate.

“MISCELLANEOUS REMEDIES

“I wish now to mention several other remedial agents under a miscellaneous class, some of them overlapping those groups we have already referred to.

“Among these we have the serum remedies or antitoxins, counterirritation, clysters, hypnotism or suggestion, etc. By counterirritation we mean any method whereby the surface of a part of the body is irritated for purpose of deflecting or changing the blood-supply from some deeper part to the surface. This is done to relieve pain and may be accomplished by means of heat, tincture of iodine, or by the familiar mustard-plaster.

“By clysters we refer to the injection of fluids into the bowels (more commonly known as an enema) or into the circulation by hypodermic injection or transfusion. The term enteroclysis means an injection into the bowel or enema.

“Hypodermoclysis means the infusion of solutions into the circulation by inserting the needle beneath the skin and allowing the fluid to flow into and be absorbed by the tissue.

“Blood may be transferred from one person to another

by uniting the veins and allowing the blood to flow across by the process called transfusion.

“One of the most recent additions to our list of remedial agents is the serum treatment, or antitoxins.

“These are growing in number, but the most familiar one, as well as the best established, is diphtheria antitoxin. It has for its basis a serum obtained from healthy horses which have previously been inoculated by the true diphtheria germ. This process of preparing antitoxin will be explained to you later, but for present purposes it is sufficient to state that the effect of this serum when injected into the tissues of one who is infected with diphtheria or membranous croup is to so change the nature of the tissue that these germs can no longer live, hence the very cause of the disease is removed.

“This is the ideal object in the treatment of all disease, and we may indeed expect great progress in therapeutics when the serum treatment has been perfected at the hands of scientists.

“The death-rate from diphtheria under the former methods of treatment was very high,—15 to 20 per cent.,—but under the antitoxin it is reduced to about 3 to 5 per cent.

“Hypnotism or suggestion in one form or another plays a most important part in the every-day practice of medicine. The influence of the mind over the various functions of the body cannot be ignored, and every intelligent nurse, as well as every experienced physician, will be glad to enlist the help of such a powerful influence in controlling their patients. Ofttimes when the physician despairs of getting any effect from his remedies he may accomplish wonders by simply explaining the action of the remedies

to his patient, who unconsciously allows his mind and will to favor the results desired.

“And is it not the experience of almost every physician to have among his patients some who express such boundless confidence that the sight or presence alone of the doctor is sufficient to quell their aches and pains, relieve and cheer their drooping spirits? In like manner we see the mother kiss the baby’s bruise and the pain vanishes instantly.

“So we find that mental impression in the form of suggestion may be used, and has been used for ages, in the treatment of some forms of disease, especially those of a nervous type.

“These suggestions have sometimes taken the form of superstition. The ancient custom of wearing amulets or fetichs for warding off disease has not entirely disappeared even among civilized and enlightened people. Wearing rings to cure rheumatism, amber beads for the prevention of croup, is common.

“And then we have our more modern fad called Christian Science and faith cure, which, like osteopathy and similar cults, find their followers among those who are ignorant of the laws of physiology and scientific truth.

“Much harm and sometimes even loss of life has resulted from the ignorant practices of these followers after a delusion.

“Music has its place also as a therapeutic agent in many forms of nervous derangement, and its action may be utilized with great benefit in proper cases.

“Leaving all other remedies, we now come to that class which we speak of as medicines or drugs.

“PHARMACOLOGY

“The study of drugs is called pharmacology, or the science of drugs.

“It embraces the study of the sources of drugs and all knowledge bearing upon their botany, chemistry, preparation, physiologic action, medicinal use, poisonous effects, etc.

“For convenience we will make four subdivisions—pharmacology, materia medica, therapeutics, pharmacy, toxicology.

“Materia medica is devoted to the study of the sources of drugs, their botany, chemistry, derivatives, etc. Also their effect on the living body, in health, called physiologic action, and their action on the body in disease, called therapeutic action. These two actions of drugs, or rather the action of drugs under these two conditions, viz., health and disease, is known as pharmacodynamics.

“Pharmacy is the art which analyzes and identifies drugs, provides useful and attractive forms of administration, thus aiding the physician in applying the remedies he prescribes in a convenient and palatable form and in exact proportions and doses.

“Toxicology studies the poisonous effects of drugs, together with their proper antidotes, both physiologic and chemic, as well as any other means of combating or antagonizing the effects of poisons in the body.

“THERAPEUTICS

“Therapeutics is that branch of pharmacology which deals with the application of drugs in the treatment of disease.

“Therapeutics, however, has a wider application, as you already know, since there are so many other sources of remedial agents, and so we speak of therapeutics in a broad sense as pertaining to the treatment of disease by whatever measures we deem best suited, and its application, therefore, embraces all that relates to the proper care of the sick.

“Therapeutics embraces, indeed, the ultimate purpose of all medical science. It is the superstructure of which all other medical study is the foundation. Whatever position a remedial agent occupies in medical science is dependent entirely upon its power or usefulness to modify, cure, or prevent disease; and so, after we have studied carefully the physical, chemic, and other properties of drugs, and the remedial value of all other agencies, for treatment, we are prepared to apply them in their appropriate cases and they then become therapeutic agents.

“Therapeutic agents are of two classes—natural therapeutics and applied therapeutics.

“Natural therapeutics refers to the operation or processes of nature in curing or modifying disease independently of man’s art. We must all recognize the fact that the human body carries within itself the means and power to cure or modify all its curable diseases. This it does by means of a powerful spontaneous force which has been called the ‘*vis medicatrix naturæ*.’

“A further truth in this connection is that all our attempts to apply remedies for the cure or alleviation of disease can at best be but aids to these great natural forces of which we have just spoken. All healing must be the work of nature. Man’s art can only assist.

“It is when the destructive forces of nature threaten to

destroy life by overpowering the forces of repair that man's art comes to the aid of the latter and oftentimes wins the victory over disease. And in this silent contest with disease the trained nurse stands as the strong right arm of the physician. Without her vigilance and careful administration of the physician's orders many lives would be lost, and the world would be a darker place for many hearts.

"The word therapeutics is derived from the Greek, and means 'to attend upon.'

"When we speak of the various means of treatment we generally prefix the name of the remedy or method employed, as electrotherapy—electric treatment; mechanotherapy; hydrotherapy; psychotherapy; serum-therapy; massotherapy; radiotherapy; climatotherapy; pneumotherapy."

The very same difficulty mentioned in the teaching of materia medica, the neglect to get the fundamental principles of a subject clearly before a class at the beginning, has been experienced in many of the other subjects. It seems to be difficult for many teachers who are experts in a particular branch to organize the knowledge they desire to convey, and also to give it in terms that are intelligible to those not familiar with the subject. A statement that appears perfectly clear and lucid to the lecturer will be as Greek to the class. In dietetics, obstetrics, and bacteriology the nurses, many times, seemed to have great difficulty in knowing how to get hold of the subject. Comparatively few lecturers among physicians were willing to pay much attention to text-books prepared for the use of nurses, and the same was true of dietitians. The dietitian wanted to use the books of her own school. The physician

had his choice of books, and both began at a different point in the subject from the books the nurses possessed, if they possessed any. Believing that the subject of dietetics was too important to be dealt with haphazard, text-book after text-book was purchased in the hope of getting the essential points about nutrition, arranged in concise form, that could be readily given to a class at the very beginning of their study of the subject. Before finding a text-book that really seemed to meet the case the author arranged and gave to her own classes the introductory lecture that follows. This the nurses were obliged to study before the class was turned over to the teacher of dietetics for demonstrations, or to take up the details regarding different articles of food or to attempt practical work in cookery. Once the substance contained in this introductory lecture was grasped, the whole subject became more interesting, because easier of comprehension. Each point was elaborated, explained, and illustrated as far as possible until it was plain to even the dullest student.

THE PRINCIPLES OF NUTRITION

The nutrition of the body includes four distinct processes:

First, the secretion of the digestive juices and their action upon food in the alimentary tract.

Second, the absorption of the food-elements, when digestion is completed, into the blood-vessels and lymphatic vessels.

Third, the assimilation, by the tissues, of the nutritious elements.

Fourth, the elimination of waste matter.

Food has been defined as that which, when taken into the body, builds up its tissues and keeps them in repair, or which is consumed in the body to yield force and heat. Physiology teaches that every act, thought, or feeling breaks down some portion of the cell-tissue from which the body is formed. If life is to continue, this broken-down tissue must be replaced. A certain amount of force or energy and heat must also be generated, and this comes also from the food that is eaten. The aim before every one intrusted with the care of the sick should be to provide, in proper form and proportion, as adapted to each individual, the food or nourishment necessary for these purposes.

CHEMIC COMPOSITION OF THE BODY AND OF FOOD

The chemic substances of which the body is composed are very similar to those of the foods which sustain it. From fifteen to twenty elements are found. Those which exist in greatest abundance are oxygen, hydrogen, carbon, nitrogen, calcium, phosphorus, and sulphur. These elements are combined in both body and food, the most important compounds being protein, fats, carbohydrates, mineral matter, and water.

CLASSIFICATION OF FOODS

There are a number of methods of classifying food-substances. These may be divided into organic and inorganic foods, the organic foods embracing the foods derived from the animal and vegetable kingdom, and the inorganic or mineral foods, consisting chiefly of water, common salt, and the other mineral constituents of the body and of food.

Again, food-substances may be divided into two general classes, nitrogenous and non-nitrogenous, the nitrogenous foods furnishing the greater proportion of material needed for tissue-building, and the non-nitrogenous, those needed for the production of heat and force. This classification is not strictly correct, as nitrogenous foods do, under certain conditions, contribute to the production of heat and force. Their most important function, however, is tissue-building.

Nitrogenous foods are derived both from the animal and vegetable kingdoms. Among the principal animal nitrogenous substances are albumin, found in the white of an egg, casein, found in milk, fibrin, found in blood, myosin, which is an important ingredient of muscle, and gelatin, which is derived chiefly from bone and ligaments.

The chief vegetable nitrogenous substances are gluten, a substance found in all cereal grains, and legumen, existing largely in all kinds of beans and peas. It should be noted that peas and beans are tissue-building foods and may often be used to replace meat or other animal foods for persons whose digestion is unimpaired.

The principal non-nitrogenous foods are: starch, a substance found in many vegetables; sugar, found in plants as cane- or beet-sugar, and also in animals as milk-sugar; gums, found in plants; and fats and oils, derived from both the animal and vegetable kingdoms.

The following list of foods may, therefore, be expected to provide material for growth and repair of tissue:

Milk.
Eggs.
Meat.

Fish.
Cheese.
Beans.

Peas.
Lentils.
Peanuts.

The following foods may be expected to produce heat and force or energy:

Cereals.	Potatoes.	Fats.
Corn.	Tapioca.	Sugar.
Rice.	Sago.	

Vegetables containing little or no starch are:

Cabbage.	Egg-plant.	Onions.
Asparagus.	Artichokes.	Rhubarb.
Spinach.	Tomatoes.	Pumpkin.
Celery.	Squash.	Cauliflower.
Green beans.	Cucumbers.	Fruits.
Parsnips.	Lettuce.	
Turnips.	Radishes.	

These vegetables contribute largely to the salts, acids, water, and other mineral substances needed for the body, and especially for the formation of bones and teeth.

There is a certain woody or tough fiber in many vegetables which, while indigestible, yet performs a useful function in contributing to the bulk of food needed, thus stimulating peristalsis. These vegetables contain little real nourishment in proportion to weight, and are not valuable for persons with weak digestive organs. For healthy people they afford a pleasing variety.

A common classification of food according to chemic ingredients is into four principal classes: protein, fats, carbohydrates, and minerals.

Protein is the term used to include the principal nitrogenous compounds, whether animal or vegetable. These elements form the basis of bone, muscle, and other tissues, and are essential to the human structure. It should be remembered that each food-substance contains a number of different elements, but is classified according to the one that predominates.

DEFINITIONS

The term albuminoids is used to include substances similar to the white of egg (albumen), the lean of meat (myosin), the curd of milk (casein), and the gluten of wheat.

The term gelatinoids is used to include the substances obtained from bone, tendons, gristle, etc.

The term proteids is used when albuminoids and gelatinoids are classed together.

The term extractives is used to denote the ingredients found in meat-extracts, broths, etc.

An erroneous idea prevails that boiling meat renders it valueless as nourishment when cooked in bulk. The albumin of meat is not readily dissolved or extracted by water. The salts and oils that give flavor to meat are largely extracted, but the remaining material contains a large proportion of the protein of the meat, and is capable of as complete digestion as the same weight of unboiled meat. With the addition of salt and vegetables for flavoring, it forms a nutritive food. Fats are found in meats, the yolks of eggs, fish, cream, butter, certain nuts, olives, oatmeal, and some other cereals.

Carbohydrates is a term used to denote such compounds as starch, sugar, and vegetable fiber. They are found chiefly in the vegetable kingdom, and abundantly in cereal grains and potatoes. In the body, carbohydrates may be transformed into fat when more food than immediate necessity demands is eaten; the surplus may be stored in the body as a reserve supply. This supply may be needed when, for any cause, food cannot be taken in sufficient quantities to repair the waste.

WATER

More than two-thirds the weight of the body is water. The uses of water in the body are:

It renders the tissues soft, elastic, and flexible.

It dissolves nutritive substances and conveys it in fluid form to the various parts of the system.

It assists in the distribution of the heat generated in the body.

It assists in the processes of absorption and secretion.

It assists in carrying off the waste material.

It moistens the skin and surfaces and acts as a lubricant, preventing friction.

COMPLETE FOODS

Milk and eggs are known as complete foods, the former contributing all that is necessary for the life and growth of the young animal or infant, the latter furnishing the material for the complete development of the young bird until it is hatched. There are three reasons why milk cannot be considered a perfect food for adults. "The proportion of water is so large that great quantities would have to be consumed in order to obtain the necessary nutriment. The protein is present in rather large quantities as compared with the fats and carbohydrates. It is a well-recognized fact that the digestive functions require that the food shall have a certain bulk other than water."*

* In the preparation of this lecture the author used as references the works of I. Burney Yeo, W. Gilman Thompson, and the bulletins of the U. S. Department of Agriculture. Of all the text-books that have appeared in recent years on the subject of dietetics for nurses, two that have proved of special value in training-school work are "Dietetics for Nurses," by Friedenwald and Ruhräh, and "Practical Dietetics," by A. F. Pattee.

CHAPTER VIII

Teaching Dietetics

While we gladly admit that we are gaining ground in the practical application of diet to disease, yet we must also admit that much less emphasis is even yet placed on this subject in hospitals and training-schools than the importance of the subject demands. Mrs. Ellen H. Richards, the well-known authority on the subject of scientific feeding, says—and who can doubt the statement?—"At present there are comparatively few persons who are called upon to feed the sick to whom a glass of milk or a pound of beef represents any definite amount of food materials; still fewer who can tell how much food value a glass of lemon-jelly or wine whey represents, and yet the adult patient is dependent upon the attendant, even more than the week-old infant, for the requisite nutrition." Not only are the young women who enter our hospitals lacking in this knowledge of food values, but many of them have no more definite idea of how to prepare food for invalids than they have of medicine or surgery. It is quite evident that some instruction in dietetics is needed. The question is, how much? To maintain due proportion in the time allotted for each subject in a nursing course is not always easy. It requires a well-arranged plan at the beginning of a course and a careful adherence to it unless it has been proved to be not a good plan.

HOW MUCH SHOULD A NURSE KNOW?

How much should a nurse know about foods? How much time should be allotted to it? Considering the multiplicity of important things that are clamoring for a nurse's attention during her first year, how much about foods ought we to try to put in the first-year studies? If she gets a clear understanding of the main principles of nutrition, of different classes of diets, and practical instruction and experience in the methods of preparation of foods suitable for invalids, it is perhaps all that she can reasonably be expected to manage in the study of dietetics in her junior year, if she does justice to other branches of nursing studies that are equally important for successful work. Even an elementary study of the principles of nutrition would include the chemic composition of the body and of food, the sources from which food is obtained, the various ways of classifying foods, the uses in diet of water, protein, carbohydrates, fats, and salts. It would also include lists of foods for tissue-building and for the production of heat and force. From the knowledge thus obtained the nurse should know how to make up suitable menus for any of the common classes of diets and to give reasons for including and excluding foods from those lists. She should know something definite concerning the food value and the proper methods of preparation of fluid foods and beverages, so that she will not be guilty of the double blunder of making tea of water that was not boiling and calling it "nourishment" in her bedside record. She should know how to administer milk in all its varied forms and disguises so that it will be suitable to the taste, and also in the best condition for assimilation. She should know the effect

that boiling or pasteurization has upon the digestibility of milk and of the best means of diluting it for weak stomachs. It would take a good deal of time to thoroughly study milk, but she ought to know a good deal about it. The same may be said concerning eggs. A nurse who does not know how to prepare eggs in a variety of ways, and serve them in an attractive manner, and who does not take pains to please both the eye and the palate, is unworthy of the name *nurse*.

In the elementary study of flesh foods, the nurse should know at least the relative digestibility of the different kinds of flesh foods, and how best to cook the foods, so as to get for her patient out of the meat the maximum amount of nourishment with the minimum tax on the digestive powers. She ought to know how to make and prepare a variety of meat and vegetable soups and purées, and should know the nutritive value of vegetables, as well as how to cook and serve them attractively.

How much should a nurse know about bread? She ought to know the difference in the food value of the white and brown breads, but more important, by far, than that, she should know how to "fix" bread, arrange it for her patient so that the sight of it will make him want it, rather than repel him. By all means she ought to know how to make a respectable piece of toast—one that is not burnt on one side and white on the other, one that is neither dabbled with butter in patches, nor soaking with melted butter.

Besides this, there is a good deal that she should know about desserts—how to make them dainty and attractive looking, as well as how to calculate from the ingredients how much real nourishment her patient is getting from

each one. And the same may be said of the miscellaneous dishes—the salads, croquettes, dressings, etc.

SECOND-YEAR STUDIES

The study of foods in the second year might very properly be in its application to different diseases, the results of dietetic errors, contamination and adulteration of foods. Perhaps this seems a good deal to require of a nurse in the line of dietetics, but she at least ought to know as much about foods as the patients she will be called on to nurse. The twentieth-century patients read and think on the subject of rational feeding. At least many of them do. The popular magazines and newspapers of the day are replete with articles on the subject of proper feeding, and ignorance in a nurse on that highly important subject is utterly inexcusable at this period in the history of hospitals and nursing.

EXTREMES TO AVOID

Between two extremes the path of wisdom is usually found. Both of these extremes are found today in the hospital world as regards the teaching of dietetics. On the one hand, we have hospitals that retain nurses for a three-year training, and give practically no instruction in the subject. In one small hospital with whose conditions the author is familiar—and there doubtless are many of such hospitals—the entire preparation of food, the setting of trays, and the serving are intrusted to untrained maids. The nurses graduate without even having been required to set a tray for a patient. In other institutions some theoretic instruction is given which, “falling upon more or

less stony ground, brings forth scanty fruit or a good crop according to circumstances." On the other hand, we have instructors of nurses who assert that a nurse cannot know too much, and who, therefore, propose to teach them all that can possibly be of any practical value, and a great deal besides that can be of very little use in nursing the sick. What possible good it can do for nurses to spend time in learning how to apply the flame test for sodium, potassium, calcium, strontium, by borax bead and Bunsen burner, is a question too deep for the average mind to answer. What practical benefit can it be to the average patient or satisfaction to a doctor to have a nurse who knows the deep mysteries of sugar, and can make a comparison of sucrose, glucose, levulose, lactose, or who can explain their preparation, composition, properties, digestion, and food value? Just how much further probationers and pupil nurses will be asked to go in the study of chemistry, pharmacy, bacteriology, and pathology in the next ten years—where we may expect to stop in our attempt to teach nursing—is a matter for speculation. A good many people believe we have reached a time when it is necessary to draw the line and popularize the slogan, "Back to nursing!"

Between the extremes cited there is a growing number of institutions that have taken a sensible middle ground. They have worked out a course in dietetics that gives nurses intelligent instruction in the foundation principles of the subject, that teaches the kinds and proportions of various foods required to maintain the body in health, the calculation of food values, the modifications in the methods of preparation that are required when dealing with the sick, something about foods suitable for special conditions,

infancy, childhood, adult life, and old age, something about the contamination of foods, the diet required in different climates, a good deal about digestion and dietetic errors and diet in disease; a course that gives much attention to practical work, attractive cookery, and artistic serving; to methods of administering food to the sick, the feeding of helpless, unconscious, or insane patients. Besides this, such a course should include some instruction in marketing, how to determine the quality of flesh foods, milk, vegetables, and groceries; the care of kitchens, pantries, refrigerators, and cooking utensils.

Special emphasis needs to be placed on the preparation of foods designed especially for use in illness, the preparation of beef-juices, broths, jellies, and the modification of milk for various diseased conditions.

The introduction of a practical sensible course into training-schools has meant a very decided improvement in the whole dietetic department of many institutions. And it may safely be said that no real improvement in training-school methods can be effected without raising the standard of the hospital. This is the universal rule when intelligence and skill take the place of ignorance and haphazard work. The thing to regret is that so many hospitals have not seen fit to bring scientific teaching to bear on this department. One of the weakest points in the whole machinery of many hospitals has been, and still is, the dietetic department. Physicians have found, and still find, it impossible to secure for their patients the special diet the conditions demand. Patients complain of the food, of the way in which it is served, and of the lack of delicacies or really appetizing variety. Friends of patients still, patiently or impatiently, carry, day after day, to

many modern hospitals, delicacies for private patients who could not relish the food provided, delicacies that the hospitals should provide. It is manifestly impossible to please everybody, but in the great majority of instances there is reason for complaint. The picture drawn by Mrs. Richards in her papers on "Hospital Dietaries" is altogether too realistic to form pleasant reading for those who carry hospital responsibility. "I have seen," said she, "a delicate girl with a very sensitive stomach served with a tray full of meat, mashed potato, squash, gravy, and sour bread,—all cold,—in quantity sufficient for a trench-digger. I have seen going out from the hands of a teacher of nurses in a diet-kitchen soggy Lyonnaise potatoes, lemon-pie with a soaked under crust, and burned toast—all on one tray. I have known of mince-pie being offered to a patient still in bed with pneumonia. In fact, I do not know of a hospital in the country from which I could not bring similar instances. If the cooking is good, the serving is bad; every evidence of total lack of appreciation of the office of food, of the best means for securing the fulfilment of that office; lack of coöperation of all departments toward this end."

Little real improvement can be expected where such conditions exist until the kitchen is regarded more as a scientific laboratory, from which is to be supplied the substances needed to repair the waste, to renew strength, to assist the body in resisting the inroads of disease, until more value is placed on ordinary food as a remedial agent, and until superintendents of hospitals and training-schools and boards of managers realize their responsibility and their shortcomings in this respect, and work together to bring about a better state of affairs.

The cost of a well-conducted dietetic department is urged against it. Nothing worth having is secured without some cost. Unless it is arranged that the materials used in teaching are used to supplement the meals, or that the nurses get their actual practice by assuming a certain responsibility for a part of the hospital dietary, this objection might be considered legitimate. It certainly costs no more to cook a steak properly than to scorch it or otherwise spoil it, and this is true of the cookery of all foods. If the nurses know, and the doctors know that they know, how to prepare simple foods, such as milk, beef, and eggs, so that they are suitable for certain conditions, less of the predigested foods, beef-extracts, and such articles issuing from pharmaceutical laboratories—foods that are always costly—will be required. A recent writer (Dr. A. L. Goodman) in the "Dietetic and Hygienic Gazette" calls attention to the necessity of greater precision in the modification of milk for typhoid-fever patients, greater care in its administration, and a more careful study of the requirements of the individual. Where due attention is given to this one point, as the doctor has proved in his own hospital practice, there will be a proportionate reduction in the cost of other items, with equally successful results. Certainly the free use of such costly preparations or articles as panopepton, peptonoids, beef-extracts, and other similar pharmaceutical products, of grape-juice, orange-juice and albumin that is the rule in hospital work in recent years, has added immensely to the cost of caring for such patients. In these days of numerous and enormous hospital deficits these questions certainly require investigation. It may, however, be accepted as a fact that even should the placing of the

hospital food department on a scientific basis, and the introduction of a sensible course of training in that branch, entail extra expense, the additional cost will be more than justified by the higher grade of service rendered.

In planning for the practical instruction, arrangements differ widely. In a considerable number of hospitals the instruction is given by a paid teacher who comes to the hospital weekly. In others the dietitian goes from city to city, spending a term of two weeks or a month in a hospital, taking charge of special diets during that time, giving lectures and demonstrations, and instructing the nurses how to conduct such a department. Usually after this course a nurse is placed in charge of the diet-kitchen and gives her time while there to the preparation of special diets and delicacies. In other institutions a trained dietitian is in charge of the diet-kitchen all the time, and nurses are detailed in turn for diet-kitchen work under her supervision. Whenever possible, it is well to have two nurses on duty in the diet-kitchen. With two-month terms, if nurses go from the diet work one at a time, it always leaves a senior diet nurse there, who understands ways and means and helps to keep the wheels running smoothly. In one large hospital having a very well-equipped dietetic department in charge of a graduate of Pratt Institute, four nurses are on duty constantly in the diet-kitchen, the terms being two months. With the exception of cereals and bread, the latter of which is bought already baked for the entire household, all food for the private patients is prepared in the diet-kitchen; also formulas for artificial food for infants, beef-juice, beef-tea, gelatin, custards, and semisolid diets, and special diets for ward patients.

The work of the diet-kitchen is divided into four branches, each nurse being two weeks on each line of food. One prepares all meat and vegetables; another, ice-creams, salads, and desserts; another, special ward supplies and infants' food; and the fourth attends to toast, broth, milk, butter, and anything that may be ordered not included in the other three divisions. All gluten bread for diabetic patients is made by the diet nurses.

The food is sent by dumb-waiter to serving kitchens on the different floors. Trays are set by the regular nurses. One nurse goes from the diet-kitchen to each floor and assists in serving it on the plates. The trays are carried to the rooms by the nurses on duty in those rooms. Ice-cream (and all ices) is dished in the diet-kitchen, and served to the patients separately, after the hot food is disposed of.

CHAPTER IX

Teaching Anatomy and Physiology

How much of anatomy and physiology should a nurse know? How much time should be devoted to the study of this subject? What is the best way to teach it? These are practical questions that have to be decided in every hospital training-school. One needs but to glance at the course of study as outlined in a half-dozen different training-school announcements to see that a great diversity of opinion exists regarding at least the first two of these questions. The extent of instruction in these branches required in the ideal training of a nurse is a much-disputed question. In order properly to care for the disordered human machine, how much does a nurse need to know concerning the structure of its different parts, their relations and functions? Certainly a thorough education in these branches of science is unnecessary, and impossible, if other subjects be granted their rightful place in the curriculum. A nurse cannot know too much about the machine, the disorders of which are to furnish the demand for her services, but she can do good, practical work without going into the minutest details of the subject.

This study is regarded as one of the foundation sciences in a nursing education, therefore the major part of the work in it must be done in the early part of the course. Just at that period in a nurse's course there is need that she get instruction on a number of other subjects if she is to be

a trustworthy and intelligent nurse. Therefore the question of amount of time that can be devoted to these studies is highly important. Before a nurse takes charge of a patient she ought to know something about foods—yes, a good deal about foods—the substances that must repair the waste of disease. She ought to know something about bacteriology if she is to prevent the spread of infection from one patient to another. She ought to know the principles of nursing and how to apply them in hourly practice. All these, at least, demand attention at the outset of a course, and none should be regarded as of paramount importance. Neither should they be slighted if the foundation for a nursing education is to be properly laid.

In planning the course on anatomy and physiology it is customary in some schools to devote the opening lecture to embryology. Some catalogues announce an introduction dealing first with the general structure of the human body, and then take up the structural elements of tissues, the cell, etc. While at first glance this seems a rational method of beginning the study of the subject, a little thought, and, better still, a little experience, shows that there are disadvantages in that method. The average girl who enters a nurses' school does not come fresh from school or college. As a rule, a few years, at least, have passed in which she has done little or no real study, and her mental processes are slower than when habits of study are well established. It is difficult, if not impossible, to teach embryology without the introduction of a great many words difficult to distinguish, and remember, and understand, and such a lecture at the beginning is apt to be decidedly confusing and discouraging. It is questionable whether any school of nursing is justified in requiring its

pupils to study embryology. After ten years' practice of nursing, there are comparatively few, if any, nurses who can point to a circumstance in which the matter contained in their lectures on embryology was of the least practical value to them. If a nurse wants to study embryology, or even astrology, let her do so, but why require it or waste time on it in the training period? If the time of the first lecture is devoted to the study of the general outline of the human body and the systems of the body, with a skeleton and charts for illustration and object-teaching, it will be found an easier road to knowledge. First let the thought of the human body as a whole be grasped, and its general structure understood, and the facts about the minute anatomy of tissue which a nurse needs to know will be decidedly easier of comprehension. "Begin with the known and proceed to the unknown" by the easiest steps possible is a good rule to bear in mind.

In dealing with the systems of the body it seems best always to begin with the bony system, the framework which supports and protects the softer structures. The muscular system naturally follows next. The order in which the other chief systems of the body shall be taught is a matter of choice. The following arrangement seems as good as any:

1. The osseous or bony system.
2. The muscular system.
3. The circulatory system.
4. The respiratory system.
5. The digestive system.
6. The absorptive system.
7. The excretory system.
8. The nervous system.

Then the study of the organs of the thorax and abdomen, their relative position and functions, might follow, and then the process of waste and repair, the chemistry of the body and the cell be taken up. If a nurse got no more of anatomy and physiology than this, taught in an elementary manner, she would have a fair working knowledge of the subject. And this is as much perhaps as it is desirable to try to put into the first year, if due proportion in time for the different studies is to be maintained. In the second and third years lectures on diseases are usually arranged, and it is a distinct advantage in studying the diseases of various organs to have as a preface the study of the anatomy and physiology of the part.

Practically every lecturer in gynecology and obstetrics begins the course with a study of the female pelvis and generative organs, their functions and their relative positions. Practically every lecturer on diseases of the eye begins with the study of the eye in health. The same rule applies to the study of nervous diseases, diseases of the digestive system, the respiratory and other systems. By arranging for this to be done, the cramming that must result if an attempt is made to crowd the whole subject into the first year is prevented, the nurse gets the broad outline of the subject as a foundation-stone at the beginning, and the more detailed study of the organs in connection with diseases comes at a time when she is better able to digest it.

So much for the arrangement of the course. In the real teaching the best results will follow if lecture and text-book are combined. To depend on the lecture method alone is folly, and it will be found that the student cannot do good work if dependent on the text-book alone. Salient points need to be emphasized. A carefully arranged

syllabus of each lecture, with proper subordination of topics written upon the blackboard, helps to get the student into methodic habits of thinking and study.

Anything that can be used by way of demonstration helps to hold the interest and to fix what is taught. A skeleton is an invaluable help, and a good anatomic chart showing the size, location, and relative position of the organs is a positive necessity to intelligent work. Wet specimens of the various parts can often be obtained, and if an autopsy can be arranged for, it will make many points clearer, especially if the lecturer knows how to utilize the teaching opportunity to the fullest extent.

A well-directed quiz at intervals serves a useful purpose in the teaching of this subject. It helps the student to get his knowledge of the subject organized; it stimulates thought and is a distinct help to him in digesting and assimilating what he has been taught.

The amount of time that needs to be devoted to these subjects depends very much on who is to do the teaching. Some teachers, by systematic planning and arrangement of a lecture, by knowing what they are going to teach and how to teach it, can get as much real substance into one lecture or class as another would in three. That question cannot be answered for any school without a knowledge of who is to do the teaching and how it is to be done.

A few years ago no one dreamed of any one but a physician teaching anatomy and physiology to nurses; and, providing the right physician can be found, he ought to be in a better position to do such work efficiently than any nurse. But "there's the rub!"—"providing the right physician can be found!" The old fallacy that every physician has a proper conception of what a nurse needs

to know, and is, by virtue of his medical training, fitted to teach nurses, dies hard. Quite recently a company of physicians met and solemnly resolved as follows, and some of the leading medical journals evidently entirely agreed with the sentiments of the resolutions: "The professional instruction of orderlies and nurses should be intrusted *exclusively* to the physicians, who only can judge what is necessary for them to know. The physicians charged with this instruction should never forget in the course of their lectures to insist on the possible dangers of the initiative on the part of orderly and nurse, and on the serious responsibility that would be incurred in case of accident by the persons thus inconsiderately stepping out from their proper sphere."

Theories are beautiful things when they will work. Usually they make interesting reading, and such resolutions will not do any one serious harm. There is, however, nothing like real, genuine, every-day experience to help one to get rid of false conceptions. For years the author held to the theory that anatomy and physiology should be taught only by physicians, and that such instruction should come early in the nurse's course if a substantial foundation for a nursing education was to be laid. In order to find out just how firmly this foundation was being laid in her own school by the physicians who were lecturing to her nurses a careful scrutiny of the nurses' lecture notes was made. She had timidly and respectfully suggested to the physician an outline of the course in anatomy, what she thought the nurses should be taught, and mentioned that the pupils were supplied with Kimmer's text-book, which she would like used. She was informed by the physician, in lofty tones, that he would rec-

ognize but one text-book on anatomy,—Gray's,—and the lectures proceeded. The notes of the first lecture, taken by one of her brightest nurses, read as follows:

“Anatomy—Cranium, complicated affair, contains brains embryo. Neural canal 1 in. in length, epiglastic membrane on either side. Rolls upon itself, dome of head is composed of membranous tissue, also cartilage. Scephalic skull proper; vault by membrane base—cartil—Indian triangular dark skin globular skull has four centers and panetal—outer and inner—softer—harder separated by one-quarter inch cellular tissue. Tetal skull—at junction sagital—fontanelle anterior and posterior—oval and long—open to years. R. F. closes sixth week new-born babe—pulse in anterior font—nucleus center of bone. Skull protection—ear to middle of head one-half inch back of—middle fissure of sylvius muddle inguinal artery.

“Legs, arms, face, heart, lowest middle inversely to parts they supply. Brain seldom injured by external—fracture at base—1 inch cebal fluid brain floats—circulation of brain and skull, 2 vertebræ unite divide into poster. cerebral arteries either side of brain. Circle of Willis. Blood-vessels pass off dead portion of brain.

“Two centers for sight in cerebrum. Nerve-fibers pass to each eye, right to left, left to right. Individual—both—or all to one eye.”

The remainder of the lecture was on the same order. What foundation is such teaching for a nursing education? What good does it accomplish? This is by no means an extreme illustration. It is quite likely that an examination of nurses' note-books in hundreds of hospitals would reveal similar conditions. A later experiment was made with another physician as a teacher on anatomy and physi-

ology. A careful outline of the course was prepared—in short, the outline that appears in the course shown in previous pages. The number of class hours that could be devoted to anatomy during the first year was stated. When the time allotted had nearly expired, it was found that only three or four of the prescribed lectures had been given, and the nurses were getting up at three or four o'clock in the morning to make excursions through Gray's, and agonize, when they found them, over the names and origin of all the muscles in the body. What possible use can it be to the average nurse to study about the pterygomandibular raphé, the mylohyoid, the levator palpebræ, the orbicularis oculi, or a hundred other portions of the human organism? If she is going to specialize as a masseuse or a director of medical gymnastics, perhaps she needs this knowledge. If she does, she needs a great deal more training along these lines than the average hospital training-school is prepared to provide, or than is possible for her to benefit by, in the limited time allowed and with the multiplicity of subjects that are demanding her attention as an undergraduate. She needs thorough postgraduate instruction, and months of uninterrupted time and study, in order to become a really efficient specialist in these branches.

Is it any wonder that nurses leave hospitals without ambition for study after the style of teaching shown as examples? Is it really teaching at all? If we accept the definition that "Teaching is causing another to know,"—to know what the teacher knows,—then it surely can hardly be classed as teaching by any impartial judge. Is it any wonder that many superintendents of hospitals and nurses, in the interests of nursing and of the prevention of cruelty

to pupil nurses, have been driven to "inconsiderately step out from their proper sphere" to courageously take the teaching of anatomy out of the hands of physicians, and either teach it themselves, or intrust it to a head nurse who had some conception of the parts of the great subject that nurses needed to know in order to become efficient practical nurses.

Most of the text-books on anatomy prepared for nurses contain altogether too much. A teacher of nursing writing on this subject recently made this comment: "There are only about a dozen muscles mentioned in nursing practice in any practical way, about fifteen arteries, about six nerves." After examining about a dozen text-books prepared for nurses, and presumably adapted for their use, the author has made choice of Furneaux's "Human Physiology" as the most simple, clear, concise presentation of the subject that has come to her notice. A few chapters may need to be elaborated somewhat, but it is much easier to elaborate, to have pupils interleave their text-books and add a few important points, than to wander through scores of tedious pages, to cull out the essential facts that will help them in actual practice. If a nurse has mastered the contents of that little volume, she ought to be able to pass any fair, reasonable examination on that subject. There will frequently come up points not contained in it, of course, but that is true of any incomplete presentation of any subject. Complete text-books on the various subjects allied to nursing should be in every training-school library for reference.

CHAPTER X

Teaching Practical Nursing

The instruction of the nurses in correct methods of practical nursing is by far the most important part of the course. It is true that "we learn to do by doing," but if uniformity, and correctness, and exactness in nursing are desired, the nurses must be shown how these are to be secured. Those who have tried it for years have concluded that one of the most valuable methods yet discovered for the teaching of practical nursing is by clinical demonstrations before the whole class.

There are few lines of instruction in methods in which clinical demonstration may not be used with advantage if the superintendent of nurses is sufficiently interested in teaching to plan for it. If she has not a genuine conviction of its value, if she is not willing to plan for it and think it out carefully, it will not be adopted in any training-school. Such things do not *happen*. It is manifestly impossible for a busy superintendent to give thorough personal instruction to each individual nurse as to the methods she wishes the nurse to use, and if her methods are left to be handed down through the uncertainties of tradition from class to class, or through head nurses, she herself would not recognize them often after a few years, and she may find no two nurses doing things in the same way. Therefore, if she wishes her methods to be the methods of her nurses, she

herself must show them to the nurses, and it must be done in classes.

Just how much instruction should be arranged to be given to probationers by clinical demonstration depends on the kind of work the nurse is to be given to do in the first year, how much teaching she will get without it, and how much responsibility will be placed upon her. That is a point in which every hospital is a law unto itself. The end and aim of all education is to fit people for the responsibilities of life and the work they will have to do, and that is precisely the end and aim of clinical instruction—to fit the nurse to do properly the various duties she will be expected to do when she is given nursing responsibility. It is a pretty safe rule to adopt that no nurse will be permitted to do any duty for a patient until she has first been shown the correct method of doing it, and understands the reason for doing things that way. It is a protection to the nurse, to the patient, and to the hospital.

The clinical demonstrations for the probation period might be divided as follows:

1. Beds, bedding, bed-making with or without a patient, management of helpless patients, changing beds, bed-making for operative patients.

2. Sweeping, dusting, preparing a room just vacated for reception of a new patient, disinfection of bedding, furniture; preparation for fumigation; care of patients' clothing in ward and private rooms; care of linen rooms, bath-rooms, and appliances that are kept in bath-rooms.

3. Baths—full, sponge, to reduce temperature; packs, half packs, foot-baths, vapor baths, hot-air; care of hair, mouth, teeth; babies' bath.

4. Administration of enemata for laxative, nutritive,

stimulant, astringent purposes; colonic flushing; preparation of fluids; care of appliances.

5. Gynecologic positions, gynecologic examinations, instrumental and non-instrumental, how to prepare for them; vaginal douches; methods of preparing appliances.

6. Local application of heat and cold, care of ice-caps and coils, care of hot-water bottles; counterirritation; inunction; bladder irrigation; uses and care of catheters; lavage.

7. Administration of medicine and preparation of solutions.

8. Preparation for and management of ward dressings, sterilization, care of dressings and appliances.

9. Temperature-taking, chart-keeping, methods of recording bedside observations, taking orders.

10. Making of bandages—roller, many-tailed, plaster, eye, abdominal, breast, and T; some methods of applying bandages and removing them.

11. Bacteriologic demonstration; methods and tests of disinfection and fumigation; cultures of different disease germs; conditions favorable to development; preventive measures.

12. Tray-setting; administration of food to delirious, helpless, and other patients; artificial feeding of infants; care of bottles and food.

BED-MAKING

For the lesson in bed-making an unoccupied room may be used for the demonstration if the class be small or the operating theater if the class be large. Before the lesson a carefully arranged plan must be made, so that the lesson

may proceed in regular order and all important points be included. If possible, an assistant should be arranged for, who will demonstrate while the superintendent lectures and explains. If a head nurse is not available to assist in this way, a senior pupil nurse could be pressed into service, and if, in years to come, she herself must manage the clinical demonstrations for her own pupils, she will find that bit of experience valuable indeed.

The hospital bed, the difference between it and ordinary beds; reasons why iron beds are preferred; methods of cleansing and of exterminating vermin; mattresses of all kinds, why some are preferred to others; protection of mattresses and pillows for certain cases; bedding—these and various other points may form the introductory talk. The bed may be made without a patient, the proper methods being explained at each step; then the bed may be made and changed with a patient, showing the proper way to change upper and lower sheets, pillow-covers, turning helpless patients, and special precautions to be used in cases of typhoid fever, abdominal operative, or accident patients, adjustment of back-rests, air-cushions—substitutes for these when hospital appliances are not to be had. One lesson that may be given here and repeated at frequent intervals all through the nurse's course is "it is practically never necessary to completely uncover any patient." This is one lesson a nurse can never learn too early nor too thoroughly. The making of a bed for an operative patient, with the other preparations a nurse would be expected to make for a patient coming from the operating-room, should form a part of this lesson also. Very plain instruction as to the temperature of water in hot-water bottles for such a bed may save embarrassment later on. Other

points will suggest themselves to those who are preparing to give these demonstrations, and a trial will convince any who are skeptical as to the value of this means to secure that uniformity of methods that is essential in a well-conducted hospital.

SANITATION

A second demonstration of methods might well be devoted to sweeping, dusting, preparing a room just vacated for the reception of a new patient, disinfection of bedding, furniture, etc., preparation for fumigation, care of patients' clothing in ward and private rooms, listing clothing, etc., care of linen rooms, bath-rooms, and appliances that are kept in bath-rooms.

There is a great difference of opinion about whether or not nurses should be expected to sweep and dust. One doctor writes in a medical journal or complains to a hospital superintendent about the graduate nurse who would not keep her patient's room in order, and who expected the maid to bring up the patient's meals and remove the tray, and demanded waiting on generally. Another doctor writes a vigorous protest against nurses having to sweep and dust and do the work of a maid, and leave undone attentions that ought to have been given to patients. And there is just as much difference in the minds of superintendents of hospitals and nurses about the nurse's legitimate work, and what she ought to be expected to do. There is a great deal to be said on both sides, and the last word on the subject will not be said in our generation. The question will be settled in each hospital in the way that the superintendent and superintendent of nurses, and authorities in general of that hospital, believe to be best

for that hospital and for their nurses. But this point must be admitted, that if the superintendent of nurses wants thoroughness and uniformity and method along the lines mentioned, she must demonstrate in some way what she understands by thoroughness. Her ideas of thoroughness and the probationer's ideas of thoroughness will be likely to be decidedly at variance on some of the points. There is not a superintendent who has not at some time had reason to reproach herself for taking for granted that the probationer knew a great many things that she did not know. The only way to be absolutely sure that a probationer knows any of the essentials of proper ward work is to teach those essentials. The wise, experienced superintendent no longer takes it for granted that a probationer, of course, knows even how to make as simple a thing as a cup of tea or a piece of toast, or dust a ward properly. In spite of protests there are those—not a small number either—who believe that the lines of work mentioned are a part of a nurse's legitimate work in the hospital and out of it, and who are living up to their beliefs, and teaching as carefully about sweeping, and dusting, and fumigating, and disinfecting bath-room appliances as they teach operating-room technic or materia medica. There are a great many who believe that habits of thinking have a great deal to do with nurse's conduct in private practice. And if a nurse is started out in the hospital with the idea that the keeping of the ward in a hygienic condition is menial work, suitable only for ward maids, she gets habits of thinking started that will stick to her when she gets out in practice and lead to trouble in the families to which she is called. And it will be generally conceded that a nurse ought to know how to do all these things properly, even if she always has a

maid at her side to do the actual work. Therefore a clinical demonstration of methods to be used in the daily performance of these duties is a necessity if the superintendent expects thoroughness.

Even though we bar air-borne diseases out of the ward, we cannot bar dust out, and the germs of any disease, typhoid fever, pus, or any of the common diseases may become dry and by means of dust in the atmosphere settle down on the food on a patient's tray, and transmit disease to one in a weakened condition.

CARE OF ROOMS

Such a clinical demonstration might be begun in a room which had just been vacated. The care of the rugs, the proper mode of sweeping, the disinfection and care of the mattress and furniture, an explanation of the patient's clothing book and the nurse's responsibilities regarding his clothing, the preparation of the room, and the methods used in fumigation in that hospital could be taught there by practical demonstration. Then the class might repair to the linen room and be taught to place on the shelves, in their proper order, the clean linen just sent from the laundry. The bad habits of nurses who pull a sheet from the bottom of a pile, and upset it and leave it in that condition, and a dozen other annoyances that have to be combated in the efforts to keep the hospital linen closets in respectable order, may be dwelt on and warnings as to what not to do given.

In the bath-rooms and nurses' service rooms, where frequently are kept the douche cans and pans, bed-pans, urinals, nozzles, sputum cups, a splendid opportunity

is afforded for teaching proper methods of disinfection and cleansing, care of plumbing, and bath-room cleanliness. Call it a demonstration of hygienic methods, or anything else that you like, but teach it somehow and teach it thoroughly. If there is one thing considered inexcusable in a hospital it is dirt, and absence of dirt never happens by accident. Nor can the nurse be taught too soon the proper methods to be used in the warfare with dirt, and especially the kind of dirt found in hospital bath-rooms.

The outline of a course of lectures to nurses on "Hygiene," to be given in a certain hospital, reads as follows:

"Water: composition, sources of impurity. Air: composition, varieties in composition produced by altitude, moisture, ventilation, effects of impure air, air space, temperature."

Not a word about personal hygiene, not a word about the way to keep a hospital ward and bath-room in a hygienic condition. There is a text of scripture which says something like this: "These ought you to have done and not to leave the other undone." That text may be applied to the outline of that course on "Hygiene."

It probably will never do a nurse any harm to know the variations in the composition of air that are produced by altitude, but she probably will never have to decide the question as to whether a high altitude or a low one should be sought in any disease, and the same may be said about the water-supply. These are questions that will be settled by other people. The nurse's opinion on the subject will not likely be asked. But it may do her a great deal of harm, and the patients in a hospital ward and out of it, if she does not know how to keep toilet utensils clean

or make a room just vacated safe and respectable for the reception of a new patient.

ENEMATA

When it comes to teaching about enemata by clinical demonstration, one might at first glance suppose that while there was a good deal to be taught, there was not much to be demonstrated. The whole subject ought to be taken up in class and the theories thoroughly explained before attempting a demonstration. Indeed, that rule should be applied to all clinical demonstrations. They should not be attempted as a simple mechanic process, but as an illustration of what has previously been taught by lecture and recitation. To begin to demonstrate how to give a colonic flushing when the nurse had but the vaguest idea of what a colonic flushing was, or even that "colonic" had anything to do with "colon," would be equal to putting the cart before the horse. Such a demonstration might be given in an ordinary class-room—the first part of the lecture, at least. The different appliances used in giving rectal injections should be collected and exhibited. The reason for preferring one kind of syringe to the other in certain injections, and the reason for never using some kinds of syringes that are on the market unless nothing else is to be had, should be clearly shown. The Davidson syringe may very properly be condemned and retired from active service in a hospital, but unless a nurse has been told the reason for discontinuing its use she may fail of good results later if she tries to use it in a private home where it so frequently forms part of the equipment for dealing with sickness. In using a Davidson syringe for

injecting a small amount of fluid into the bowel it is almost impossible to prevent air being drawn into the syringe with the enema. When a nutrient enema is thus administered, the effect of the air is to excite peristalsis and cause evacuation of the bowel, and the same objections to the use of a funnel in such work may be urged. Thus, by using improper appliances, a nurse may very easily defeat the object of the treatment.

So many points enter into the successful administration of enemata, and such important results are dependent upon their skilful administration, that too much pains cannot be taken to teach thoroughly and clearly the exact points to be observed in giving the different classes of enemata. Even the lubricant used for the rectal tube may influence the result of an enema. It is well known that glycerin excites peristalsis, and while it might be perfectly admissible to use it in giving a laxative enema, it ought never to be used in giving a nutrient enema. The position of the patient, the way to elevate the hips, the aids to retention, the quantity, the temperature, the preparation before giving an enema that is expected to be retained, the length of tube to be passed in high injections, the preparation of a simple soap-suds enema, a starch enema with laudanum, the small special enema now so often used in surgical cases, consisting of salts, glycerin, etc., and the preparation and administration of a nutrient enema which has been preceded by a laxative enema, with the appliances to be used in the hospital for those purposes, will make a valuable lesson to the nurse. It will save the superintendent much future annoyance—the exasperating kind of annoyance that comes from blunders and from taking things for granted. It will not prevent all blunders and failures in the administration of

enemata, but it will lessen the number. In general it will be found that a hard-rubber syringe holding about four ounces attached to a rectal tube is a good appliance to keep on hand for the giving of nutrient enemata.

An important part of this and all lessons is the care of appliances before using, immediately after using, and the teaching of the place in which they are to be kept when not in use. A nurse cannot be too thoroughly impressed with the importance of these duties, which mean the difference between order and disorder in a hospital.

In connection with the lesson on enemata it is wise to have samples of suppositories on hand, to tell for what purposes they are used, and to give one before the class. The need of this practical teaching about suppositories was forcibly demonstrated in a certain hospital. The young superintendent had not learned the value of practical teaching, and had passed over the subject of suppositories in class with a casual mention of their uses. One nurse at least, in the class, had never seen a suppository, and had but a very vague idea of what the thing was. It so happened that a year or more passed before she was ordered to give a suppository, and before that time all that teacher and text-book had said about the things had passed from her mind. If the teacher had shown a suppository and had given one before the class, she would have been likely to remember what she saw. The suppository was sent to her to give, and the superintendent, to her dismay and humiliation, learned afterward that the nurse had taken the suppository to the patient in a teaspoon on a little tray with a glass of water and tried to make the patient swallow it. The nurse who did that is married now, and out of active practice as a nurse, but from stories heard there are

nurses still in hospitals and elsewhere who have made precisely the same blunder. The remedy for that kind of blunder is thoroughness in teaching and the practical demonstration, so far as possible, of the methods to be used.

THE ADMINISTRATION OF MEDICINE

A demonstration of methods of administration of medicine is rather more difficult to plan for than some other demonstrations, but it can be done and it is just as much needed as practical instruction along other lines. As in other subjects, the theory should be taught before attempting to demonstrate methods. There are at least five or six methods by which medicines may be given, each method requiring a different apparatus, which may be shown. Each hospital has its own way of making out medicine lists and getting out medicines, which need to be explained. Even in the simple matter of pouring out a dose of medicine and carrying it to a patient a nurse will show whether or not she has been well trained.

Such a demonstration may commence with an exhibition of specimens of ordinary medicines in their various forms—pills, tablets, capsules, powders, oils, plasters, liquids, ointments, etc.—and also the various appliances and vessels used in measuring or administering medicine. These would include medicine-droppers, minim glasses, graduate glasses, large and small, atomizers, inhalers, hypodermic syringes, antitoxin syringes. It would be well also to show how appliances for the inhalation of steam or medicinal vapor may be arranged and improvised, also the proper method of using the nasal douche, eye-bath, eye-drops, and ear irrigations.

The method of preparing a hypodermic injection, and preparing the part for it, as well as the method of giving it, should be shown, and what is fully as important, the proper way to take care of the hypodermic syringe and needle when not in use. The superintendent who teaches this lesson thoroughly may then be sure that every nurse knows better than to leave needles without wires, and syringes to dry up, so that when a syringe is needed in a hurry, both syringe and needle are of no value. The proper method of caring for medicine-droppers, atomizers, and such things, and the place in which they are expected to be kept, together with the care of medicine cupboards, a listing of the medicines that must not be kept in a warm place, others that will deteriorate if kept in the light, may be introduced into this lesson with profit.

This kind of teaching for nurses will be the means of saving expense in ways that are perhaps not dreamed of at the time. The nurse who has thus been carefully instructed will not be likely to make the blunder a nurse superintendent made not long since. She had the carpenter arrange a set of shelving against a chimney in the drug-room, and gave instructions to have placed thereon large stock-bottles of a number of different preparations, also the entire stock of suppositories. To her great dismay she found soon after that most of the drugs had deteriorated so as to be unfit for use, because of being placed against the chimney, and the suppositories had melted.

Unless a superintendent wants her nurses to carry pills and tablets in their fingers and a glass of water in the other hand she will need to show them a better way. The best way to give medicine to delirious or insane patients should be shown, and also how to give medicine to a baby. The

way to prepare chloroform and ether inhalers may also come in this lesson.

Either in this lesson or in the teaching of *materia medica* specimens of crude drugs may be shown. This demonstration may properly conclude with a lesson on the preparation of solutions and the care to be exercised in handling them. A few questions in the arithmetic of medicine, working out percentages, calculating doses, ought to come in somewhere. There is no better way to make sure that a nurse will not make the blunder that some nurses have made of giving two one-fiftieth grain tablets of nitroglycerin when they were ordered to give one one-hundredth of a grain or two one-thirtieth grains of strychnin when they were ordered to give one-sixtieth of a grain, and the tablet with the exact amount ordered was not in sight. Exactness in nursing costs. It is never secured without a large expenditure of brain work and time and energy. But no one ought to undertake the business of teaching nurses who is not willing to pay the price needed to secure it.

BATHS

In no part of nursing is careful teaching of practical methods more important than in the giving of baths. To send a nurse, without instruction, to give a bath of any kind to a patient is a grave injustice to both patient and nurse. The very first duty a probationer was given to do in a certain hospital was to sponge a typhoid-fever patient to reduce temperature. She had never seen a fever patient before, knew absolutely nothing about the disease, the precautions to be used, or of how to sponge for any purpose. That happened some years ago, but there is

every reason to believe that, today, the practice of thrusting such duties upon nurses without previous instruction and demonstration of methods is carried on in a large number of hospitals. An orderly who was employed in a hospital of 300 beds, in applying for a position in another institution, stated that he "knew how to give all kinds of baths, *and often had to teach the new nurses how to give them.*" He said that, just the night before, a nurse was put on night duty for the first time. Orders were given to her to apply cold packs to two typhoid-fever patients. She had never seen a pack applied, had no idea of how to go about it, and came to him to show her how. He had had eight years of ward work, and, of course, had learned a good deal regarding practical methods. Knowing something of the reputation for veracity of the average orderly, and believing that this one surely must have been exaggerating or coloring the facts, a careful inquiry was made of others who were in position to know the truth. From other facts learned regarding the methods of instruction in that institution and others there is every reason to believe that some nurses are still left, in a great many hospitals, to pick up methods from orderlies or ward maids, to evolve their own ways of doing things, or to learn by their blunders and at the expense of the patient. This may not be true of the majority of hospitals, but, unfortunately, it is true of some.

Water is the only remedy that is found everywhere. It is applied to a wider range of diseases than any other remedy. It is a safer remedy than any other for a nurse to use in a great many emergencies which she will have to meet. In most cases its success as a remedial agent depends on attention to the minutest details. Whether it is

used in the form of ice, or steam, or in its liquid state, whether it is applied hot or cold, its chances of success may easily be defeated by ignorant or careless management. And yet, in a great many schools, if one is to judge by their published announcements, not one lecture, not one class in theory, not one careful demonstration of how to apply this simple and powerful remedy, is given in an entire three years' course. The neglect of this branch in many nursing schools is hard to understand until one brings himself to realize that the very same neglect is found in many schools of medicine.

If water is to be applied intelligently and the best results are to be produced, systematic and careful instruction, accompanied by demonstration of correct methods, should certainly be given. The nurses should understand something of the physiologic effects of external and internal applications of water, when it should and should not be used. It is well known that effects vary according to the mode of application, the duration of the treatment, the temperature of the water used, and also the temperature of the room in which the application is made. But there are a great many nurses sent out as graduates who could not state with any degree of confidence or accuracy the degrees of temperature at which a bath might be classed as cold, cool, tepid, warm, or hot.

The technic of baths is certainly as important to the great majority of nurses as is surgical technic. Many nurses in private practice are not called to deal with one surgical case in a year. Most patients who need surgical operations go to hospitals, even if they are able to pay a nurse, but there are comparatively few medical cases in which the nurse will not have an opportunity to apply water as a remedial agent.

In arranging for clinical demonstrations it is wise, as far as possible, to teach methods that can be carried out in a private house and without an expensive outfit. The right use of the appliances provided by the institution for giving scientific treatments will, of course, be included, but the other phase of the subject should not be neglected. Clinical demonstrations on the subject of baths may wisely begin with the correct method of giving a cleansing bath. Methods of sponging with and without friction, of applying the wet-sheet rub, the wet-sheet packs, hot and cold, the various forms of compresses, the half packs, the Scotch douche, the spinal sprays, the foot-bath, and all the variety of external applications will certainly mean very valuable lessons for every nurse. A few points will usually need emphasis—the need of avoiding unnecessary exposure, of saving the strength of the patient, the necessity of avoiding guessing or of trusting to the sensations, the need of using a bath thermometer to determine temperature, that the effects are not alone due to the water, but to the impressions of heat or cold produced by water when applied to the body.

Regarding the internal uses of water, such as in lavage, irrigations, enteroclysis, saline injections, hypodermoclysis, etc., there will be no difficulty in securing opportunity for practical teaching. After showing to the class the different appliances and explaining their uses, how to prepare them for use and care for them afterward, it will usually be better to take small groups of nurses, when such treatments require to be given, and instruct them in the art. In planning such instruction for her own classes the author has depended largely on Kellogg's "Rational Hydrotherapy." A study of the illustrations in that volume cannot but prove of very great assistance in arranging for such clinical demonstrations.

CHAPTER XI

Teaching how to Observe Symptoms

The criticism has been made of nurses that though they have better opportunities than are afforded any one else of continuous observation of the manifestations of disease, yet they have added nothing to the sum of human knowledge of the subject. Those who are familiar with the situation know how easy it is for nurses to get into perfunctory habits of bedside observation and recording—how much more they might see than they do; at least, this is true of the majority.

If this condition is not forever to exist, more attention will need to be paid to teaching them what and how to observe. In most text-books there are instructions regarding points to notice. This theory should be taught early in the course, but the best teaching of symptoms will be that which is done day by day, at the bedside, by physicians and head nurses.

A progressive physician has said, "There is no doubt in my mind that there are many facts about disease which will never be noticed at all, and so never become part of our working knowledge unless nurses have the energy and persistence to record them and bring them before our attention.* Under his direction the nurses of a certain hospital were induced to make a special study of vomiting. Inasmuch as a nurse has fifty chances to see the act of vomiting,

* Dr. Richard Cabot, in "The Trained Nurse."

to observe the symptoms that preceded and followed it, to one chance that a physician has, it was hoped that by directing special attention for a time to that one symptom facts might be learned that physicians had not before thought of. The observations were to continue until 1000 cases had been recorded. These observations of this one symptom were then to be put together, classified, and arranged in statistic form.

At the City Hospital, Worcester, Massachusetts, a very thorough and interesting clinical course on the observation of symptoms has been given by Dr. George E. Deering, Assistant Superintendent, an outline of which is introduced here, by permission of Dr. Deering, in the hope that it may prove suggestive to teachers of nurses.

"OUTLINE OF CLINICAL COURSE

"This course is intended to give the nurse a comprehensive idea of how and why the doctor makes certain examinations, in order that she may be a more efficient and intelligent assistant, and to make her a better and more accurate observer by teaching her what she should observe, and giving her a definite and accurate idea of certain phenomena, the immediate and intelligent observation of which not infrequently means so much to the patient.

"A considerable number of more or less unimportant phenomena are introduced into the course as they present themselves, both to keep up interest and to bring into more marked contrast conditions of greater importance.

"No attempt is made to teach diagnosis, the whole object being to make the nurse a better and more accurate

observer, a quicker and more consistent thinker, and a more resourceful and efficient helper to the physician both in the hospital and in private nursing.

"The class is divided into small sections, five or six pupil nurses in a section. One hour is allowed for each clinic. A talk of from five to ten minutes is given before the exercise, explaining the important points to be observed. Sufficient time for asking and answering questions and for discussion is allowed at the end of the hour.

"The first five exercises are given in regular order, the object being not to teach the pupil to diagnose any of the diseases shown, but to increase her powers of observation.

"These five exercises are on the circulatory and respiratory systems. Typical cases are always shown.

"FIRST CLINIC—NORMAL CHEST

"Two patients are used.

"A regular routine examination is made by instructing, including—

Inspection.

Palpation.

Percussion.

Auscultation.

"Each step is carefully explained, the nurses taking notes if they so desire. Each nurse repeats this examination herself and compares notes with the instructor. The object of this clinic is to show the nurse what is normal, and to emphasize the necessity of quiet during examinations.

"Proper positions are shown.

"Draping patient for examination is taught at this exercise.

“SECOND CLINIC—HEART-SOUNDS

“Murmurs.

“Aortic and pulmonic second sounds.

“This is a lesson in accuracy of observation.

“The nurses in order (without instruction other than that given at first exercise) palpate the heart apex, count the ribs, and write on paper where they consider the apex to be. This paper is immediately handed to instructor, notes are compared, and each nurse individually shown the correct method.

“Each nurse listens to one or more heart murmurs. No attempt at diagnosis is made.

“Each nurse listens in the pulmonic and aortic areas, and writes on paper which sound is louder, handing same to instructor at once. No discussion is allowed until all have examined patient. Those in error are then shown the cause of wrong observation.

“THIRD CLINIC—PULSE

“This being one of the most important exercises in the course, considerable care is used in selecting cases, and as there are constantly upward of 200 patients in the house, there is no difficulty in illustrating the variations in quality, etc., on typical cases.

“Each nurse palpates the radial, facial, temporal, carotid, dorsalis pedis, and brachial arteries in cases where the pulse is normal.

“A case of arteriosclerosis is shown and the artery palpated, and cause of findings explained.

“A tortuous artery is examined.

“On suitable cases the following characteristics are illustrated, and terms are explained:

Volume.

Tension.

Rate.

Rhythm.

Quick.

Dicrotic.

Well sustained.

“On other cases the nurses make the observations themselves, committing themselves on paper, and when all have made the examination, are corrected if wrong. The effect of fever in quickening and weakening the pulse is shown, and the increased tension in the two diseases, nephritis and arteriosclerosis, is illustrated. The irregular pulse of myocarditis and the irritable heart of certain nervous conditions is demonstrated. The slow pulse from pressure (head pulse) or as seen in meningitis, or under the influence of digitalis, is shown when possible.

“FOURTH CLINIC—RESPIRATORY AFFECTIONS; PNEUMONIA

“The nurses are taken to the bedside of an acute pneumonia case, after having been given a short talk on the disease, and asked to make a note of what they observe that is not normal. It is expected that they will notice the—

Face.

Respiration (rate and character).

Tracheal râles, if present.

Cough.

Character of sputum.

Temperature-chart.

“The chest is inspected and the nurse expected to see any differences in the movements of the two sides, and to

observe the intercostal spaces on both sides carefully for alterations from normal. Tactile fremitus is felt. Difference in percussion-note is demonstrated. Vocal fremitus, bronchial breathing, whispered voice, and râles are listened to. The above exercise is given in a way to impress the nurse that to observe accurately, the whole attention must be on the matter in hand.

“FIFTH CLINIC—TUBERCULOSIS

“This exercise is intended to bring out more clearly the salient points of the preceding lesson. The same method is used as in exercise four, and results contrasted with those in that exercise. Less time is given to the clinical side of this disease, and more to the preliminary talk, especially to emphasize the importance of prophylaxis and the lines along which this should be carried out.

“The above five clinics are always given in order. Other exercises may, however, be put in between any of these if rare or especially interesting cases are in the house or an epidemic (as typhoid) is prevailing.

“The following exercises are given when the clinical material warrants, but not necessarily in the order below, although this order is preserved when possible:

“SIXTH CLINIC—PLEURISY WITH OR WITHOUT EFFUSION, AND EMPHYEMA

“These conditions are shown on typical cases, the same plan being used as in above exercises. Aspiration is shown when practicable, and the apparatus for tapping the chest is demonstrated, each nurse assembling and using it herself, that she may understand the principles of its action.

“SEVENTH CLINIC—TYPHOID FEVER

“Preliminary talk includes a few words on shape and size of bacteria in general. Source of infection and prophylaxis are emphasized, special reference being made to care of excreta in the city and in the country. Cause of mental condition and causes of death are explained, and the danger-signals of these latter conditions are dwelt upon.

“As many cases are shown as possible.

The appearance of the face noted.

Rose-spots shown.

Spleen palpated.

Temperature-charts examined and changes in temperature and in pulse-rate explained.

“EIGHTH CLINIC—RHEUMATISM

“As many types of rheumatism and rheumatoid affections as can be obtained at the time are shown. The dangers and signs of danger are emphasized, especially regarding the heart. The untoward effects of certain antirheumatic drugs are illustrated when possible, and considerable emphasis placed on the signs and symptoms that may be caused by these medicines. The writer has seen more or less severe stomach trouble and annoying ear complications arise where these drugs were being forced and where the physician was depending on the nurse for warning of untoward effects.

“An endeavor is made to show the following:

Rheumatic fever.

Rheumatism.

Acute.

Subacute.

Chronic.

Sciatica.

Lumbago.

"A typhoid knee was shown a year ago.

"NINTH CLINIC—NERVOUS DISEASES

"The following diseases were shown last year. The characteristic signs and symptoms were brought out clearly and the nurse expected to note the variations from normal:

Apoplexy.

Tabes dorsalis.

Chorea.

"TENTH CLINIC—SKIN DISEASES

"When it can be properly done, erysipelas, impetigo contagiosa, scabies, and a case of eczema are shown.

"ELEVENTH CLINIC—GLANDULAR DISEASES

"Diseases of this type are shown where practicable. Special attention is given to glandular enlargement due to syphilis, tuberculosis, and to pediculosis. A case of glanders (farcy type) was shown last year.

"TWELFTH CLINIC—MENINGITIS

"Meningeal cases are shown if practicable.

"THIRTEENTH CLINIC—ANEMIA

"Last year we were able to show primary pernicious anemia and secondary anemia from gastric hemorrhage in beds side by side. The hemoglobin estimation test with the Talquist scale was performed by each nurse.

The nurses are also taught in this exercise, or in any other where there is time, to make blood smears, and also smears from the other secretions.

“FOURTEENTH CLINIC—CIRCULATION OF THE BLOOD IN A
FROG

“This is shown in the web of a frog’s foot under the microscope, each nurse actually seeing the blood flowing in an artery, seeing the artery break up into capillaries, and the capillaries again pour their blood into a vein. At this exercise the processes of inflammation are demonstrated. The nurse sees the blood-stream increase in rate of flow under slight irritation and slow up under continued irritation and finally stop. The inflammatory exudate is then examined under the microscope and its characteristics noted.

“At this exercise a nerve muscle preparation is made, using the gastrocnemius muscle of a frog. Muscle contraction, caused by direct irritation and by nerve stimulation, is demonstrated. A specimen of fresh blood is examined under the microscope.

“FIFTEENTH CLINIC—AUTOPSY ON A CAT

“A regular autopsy is performed on a cat. The nurses examine the organs, note their location, and are shown the various tissues which they have previously studied in their anatomy course. The larynx, eye, and tongue are demonstrated.

“In addition to the above, the following phenomena were shown during the course last year:

Tympanites.	Palate reflex.
Loss of liver dulness.	Tracheal râles.
Abdominal retraction.	Cheyne-Stokes respiration.
Edema.	Linea albicans.
Heart.	Facies.
Kidneys.	Peritoneal.
Malignant disease.	Lead line.
Facial paralysis.	Club-fingers.
Nephritis.	Jaundice.
Certain speech peculiarities.	Satiny skin of alcoholism.
Taches cérébrales.	Uremic coma.
Chill contrasted with chilly.	Enlarged liver.
Gangrene.	Drug-rash.
Cyanoses.	Litten's phenomenon.
Emphysema of chest-wall.	Goiter.
Stigmata.	Babinski's sign.
Knee-jerk.	Ankle clonus.
Rose-spots.	Incoördinate movements.
Ascites.	Visible peristalsis.
Bradycardia.	Purpura simplex.
Tachycardia.	Erythema nodosum.
	Angioneurotic edema."

CHAPTER XII

Teaching Materia Medica

How to teach materia medica, how to make it interesting to the class, how really to get up any enthusiasm for the subject, is one of the problems of every teacher of nursing. Teachers have worried over it, student nurses have agonized over it and wrestled with the lessons, often giving up the struggle by going to sleep with "Materia Medica" under their pillows. As a hypnotic, a text-book of materia medica is often more powerful in its effects than trional. But a certain amount of it has to be taught and has to be studied. How shall it be done? What can the teacher do to increase interest in this subject?

In the first place, she must know the things she would teach. It is not sufficient to prepare for class by picking up a text-book a few minutes before recitation time and glancing over it. There must be a definite plan for teaching the lesson in the teacher's mind. A lesson that lacks plan in the teacher's mind need never be expected to take definite shape or stick in the pupil's mind.

This is another subject which custom has decreed must be taught by physicians only. We have tacitly admitted that nurses were quite capable of arranging a *text-book* of materia medica. Nurses and training-schools, physicians, and medical critics of literature have given cordial indorsement to the two very excellent text-books on the subject, arranged by nurses, that are now in general use,

but when it came to the actual teaching of the subject, we have held to the idea that it should be done by physicians. A physician, by reason of his wider knowledge, certainly should be able to handle the subject better than a nurse, and some physicians have proved admirable teachers. A great many have proved dismal failures. Whoever is selected to do the teaching, in justice to the class some attention should be paid to the question of how much the nurses are really getting out of it. There are at least three classes of physicians who attempt to lecture to nurses:

1. The man who rambles all over the field at every lecture, rarely succeeding in giving the class the salient facts about any one drug, and who leaves them in the end with their minds in a confused jumble—practically unbenefited. (A supervising nurse counted seventy-five different drugs mentioned in one lecture.)

2. The man who is so exasperatingly thorough, according to his own ideas of thoroughness, that he will spend the whole evening in going into the minutest details of one drug, and by the time the allotted number of lectures has been given, he will have only gotten started. He usually feels dreadfully abused because he cannot continue to lecture throughout the entire year.

3. The man who finds out before he starts how much time is allowed for the course and the ground he is expected to cover. This man, before starting, makes out an outline for each lecture, taking care that the most important points—those that will be of practical value to the nurse—are included. He carefully systematizes the whole course, and gives the facts to the nurses in concise form, and in the way that will be most easily grasped. He directs their study. He really teaches. The very same classification

might be made of nurses as teachers, though they are less liable to attempt to teach when they are absolutely unfitted for such duty.

How much of materia medica should a nurse be expected to know in order to become an intelligent nurse? No doctor, much less a nurse, is expected to carry the facts about every drug in the pharmacopeia in his memory. Until this question is answered the teacher is not ready to begin to teach materia medica. In the syllabus of the course of study outlined in previous pages only the lectures on the subject for the preparatory period are outlined, while it is expected that some additional lectures will be given. A whole lecture may very profitably be given to alcohol, its effect on the healthy body, its use in acute illness; the effects desired in such cases; its effect on the nervous system; how a nurse may know when it is, or is not, having the desired effect, and its contraindications. Another lecture may deal with the newer medicines—those that have come into more general use within the past few years, such as veronal, chloretone, somnal, ichthalbin, scopolamin, etc.

Another lecture might deal with the various forms of foods which come in the shape of medicines, their composition, food value, etc. In connection with this lecture some very interesting experiments can be arranged, showing the action on food of various popular digestive preparations which the nurse will use almost constantly. While this teaching may be included in the course on dietetics, it may just as properly be included in this course, since the materials dealt with are pharmaceutic preparations.

There are interesting facts connected with many of the drugs in common use that may be brought out, that would add variety and interest to an otherwise dry lesson. For

instance, belladonna, the drug so much used in eye work, is now being very successfully cultivated in New Jersey, the seed being sown in the conservatories in February and the plants maturing late in September. The quinin we use is obtained from the cinchona tree, which was named in honor of the Countess of Cinchon, the wife of a governor of Peru, on whom it was used in a fever with very gratifying effects. The medicinal properties of the bark of the tree had long been known to the South American Indians, but its value had not been generally recognized by the medical world previous to its use on her case by one of the court officials. These are only a few examples of facts that may be interspersed with the teaching that will help to change a subject that seems, at first sight, dry and hard and uninteresting to one that is, if not fascinating, at least bordering on it. It depends greatly on the command of the subject the teacher has and the amount of brightness and energy he puts into it.

A whole lecture can very profitably be devoted to a discussion of animal extracts and sera. The study of the methods of obtaining the various sera and animal extracts now on the market is unusually interesting. While the therapeutic value of many of the sera is disputed, and the subject is one on which there is certain to be a wide difference of opinion for years to come, yet the value of some has been proved beyond question. The serum for tuberculosis has thus far disappointed hopes; the serum for typhoid fever is being experimented with, and has yielded good results in some cases; the serum for dysentery has not come up to expectation; and antipneumococcic serum has not proved of practical value; the serum for hay-fever is said to mark a significant advance in the treatment of disease;

the tetanus antitoxin has markedly decreased the mortality from that disease. Of all antitoxins, the diphtheria antitoxin has given the most satisfactory results. It is the one with whose effects the nurse will probably become most familiar in general practice. These sera are obtained in a great variety of ways. Extensive experiments are now being carried on, and there is or seems to be a widening field for serum-therapy. From the manufacturers of biologic products pictures illustrating the different steps in the process of preparation of vaccine, sera, etc., can be secured that will not only make a dry subject more interesting, but will give a clearer idea than any words alone could convey of the very great care that is taken in the preparation of these products, the cost of them, and the points to be guarded against in handling them.

“All nature, animate and inanimate, has been laid under contribution to provide remedies for the alleviation of disease.” The animal, vegetable, and mineral worlds have all furnished of their products. Samples of crude drugs can usually be obtained from chemic laboratories that will add interest. Nurses are but children of a larger growth, and anything in the line of an object-lesson helps them to a clearer understanding. If the teacher could visit some of the laboratories of manufacturers of pharmaceutic products and see medicines in the making, she will see much that is of practical value in teaching the subject.

Text-books of nursing all contain definite instruction about the administration of medicines, but in the school of experience the teacher has learned a great deal about the question that is not usually included in the text-books. Drug accidents are, unfortunately, not rare. Ever and anon reports are heard of another patient who has come

to an untimely end in a hospital from the administration of a wrong dose. Such accidents may serve a good purpose in every hospital if brought to the attention of nurses, and their responsibility in handling medicine is thus more strongly impressed upon them. Constant familiarity is very apt to lead to carelessness, unless reminders of possible dire consequences are very frequent.

There is another phase of the subject that may well be emphasized in dealing with every class. Very often in actual experience it is left to the nurse's judgment to give or withhold a drug. Occasionally it has been noticed that some nurses gave morphin and sleep-producing drugs more frequently than the occasions seemed to warrant. In fact, it is admitted and regretted, by a great many who know whereof they speak, that the use of hypnotics and narcotics is far too common both in the hospital and out of it. Of course, in the hospital this is, in the final analysis, the physician's responsibility, since every patient is in charge of some physician. If he leaves no orders or says absolutely that certain drugs must not be given, they are not given. If he says they shall be given, they are given. But there are still a great many cases in which he does not say the one thing nor the other. If a patient wants a drug, he often permits it to be given, but does not distinctly order it. He leaves the nurse to decide whether it is needed or not. There have been cases when, because a patient was troublesome, the nurse has been known to report a very much more serious condition than facts warranted, in order to get permission to give morphin; or has given a dose of some hypnotic because she was permitted to, without attempting to woo sleep in any other way. The majority of nurses will not be thus guilty, but it is safe to say there

will always be some, in a school of any considerable size, who will. These are undesirable and delicate questions to discuss, but in view of the steady increase in the ranks of the neurasthenic, hysteric, and insane, of the growing number of drug habitués, the question of a nurse's responsibility in administering hypnotics is one that demands serious treatment on the part of teachers and supervisors.

The same is true about the use of alcohol. Some nurses will freely use it for flavoring fluid foods, when it had not been ordered by the physician to be given in any way, and have thereby stirred up an appetite that had been a source of weakness and sorrow and remorse to the patient, and which he was struggling to overcome. Many times these unfortunate incidents are the result of sheer thoughtlessness, which clearly shows the need of plain teaching on these points.

Hubert Richardson, M.D., of Baltimore, in the "Dietetic and Hygienic Gazette," January, 1907, in writing on "The Treatment of Insomnia," gives some results of his observations in the use of a number of hypnotics which may be of help in teaching these lessons. "Opium," he says, "is probably most used even when there is no pain, and it certainly does not produce the conditions for normal sleep. . . . It is evident that instead of producing the conditions for normal sleep, opium causes unconsciousness by intoxication, which may or may not be followed by sleep; the centers of consciousness are not at rest, but poisoned.

"Paraldehyd produces a condition resembling sleep, and is described as being perfectly harmless. . . . I have seen a victim of the paraldehyd habit who, upon failure to get his dose, was thrown into an intensely nervous con-

dition resembling mania. Gradual reduction of the drug was impossible, as the patient knew the odor, and knew at once when the dose began to get low; finally, the drug was stopped altogether, and after a week of maniacal excitement he recovered. Another instance was an alcoholic, who had been taking a nightly dose for some weeks. He developed a mild attack of acute uremia with edema. . . . On stopping the drug without any treatment, the elimination of urea rose to 84 gm. in twenty-four hours, and the total quantity of urine to 2500 c.c.

“Chloral produces effects which are more likely to produce natural sleep. . . . Although its physiologic action comes nearer producing the circulatory conditions of normal sleep, it must act as a poison, for the chloral habit soon shatters the constitution.

“Bromids reduce respiration and slow and weaken the heart, being a direct nerve poison, producing sluggish reflexes and defective coördination.

“Hyoscin hydrobromate, if its use is prolonged, is apt to derange the mental faculties.

“Sulfonal and trional are probably more used than any other hypnotics, both by the profession and the laity. Potter, quoting Squibb, says that ‘if it were not for the very evident advantage of sulfonal when used with care and under medical supervision, it would probably be either excluded from practice or its sale restricted by legislative authority.’ It produces its hypnotic effect by direct action on the brain-cells, and upon the red corpuscles by dissolving lecithin. A dose of 20 grains is invariably followed by a large amount of hematoporphyrin in the urine, showing a marked destructive power on the erythrocytes. . . .

“The other hypnotics on the market have practically

the same effects as those mentioned; that is, they produce sleep by intoxication and are, therefore, poisonous. The physiologic action of the bromids and of chloral come nearest to producing normal hypnotic conditions, but their toxic conditions are well known."

Plain facts about these drugs need to be stated to nurses while in training. While joining in the crusade against the use of patent medicines as opportunity offers, it is certainly wise to do a little special crusading against the *unnecessary* use of this class of remedies, and to emphasize the numerous simple measures that a nurse can use that may, in a great many cases, render their use unnecessary.

MEDICINES AND FOODS

Still another point regarding the giving of medicines that is often slighted in teaching is concerning medicine in its relation to food. In arranging the hours for the administration of medicine much is left to the discretion of the head nurse in the hospital or the nurse in charge of the case in private practice. When the directions simply read: "One teaspoonful every four hours," shall the nurse arrange the hours beginning at six, seven, eight, or nine? The particular effect such medicine will have on the food the patient is taking should be one determining factor in fixing the time.

"So little is really definitely known of the intricate chemistry of digestion and assimilation," says W. Gilman Thompson, in "Practical Dietetics," "that it is difficult to formulate rules for the right time of giving every drug in relation to fulness or emptiness of the stomach. The reaction of the stomach-contents varies from alkaline to neutral and acid, and these several reactions will decom-

pose medicines in various ways. Besides this, the reactions themselves are dependent on a large number of organic acid salts, and other substances which may wholly alter the composition of medicines at one time, and not be present to affect it at another. A drug given after a full meal may be decomposed by the strong hydrochloric acid of active digestion, which is unaltered in an empty stomach. . . .

"The following rules are subject to many exceptions, but they will serve as a general guide:

"Alkalis are best given shortly before meals unless designed to neutralize hypersecretion of hydrochloric acid.

"Acids should be given within half an hour after meals.

"Bitters should be given before meals.

"Remedies, such as iron and arsenic, which may prove somewhat irritant to mucous membrane, should be given either soon after the regular meals or after taking some simple article of food. Ammonium carbonate and potassium iodid, for example, may be prescribed in milk.

"Most cough medicines, cardiac tonics, diuretics, and systemic remedies which are not especially irritating to the stomach should be taken between meals. They will be more promptly absorbed from an empty stomach, and are less liable to be altered in composition by digestive fluids or to inhibit digestion.

"Remedies designed to act in the intestines and not in the stomach, such as salol, should be given at the end of gastric digestion, when the stomach-contents are about to pass into the intestine.

"Saline laxatives should always be taken at least half an hour or an hour before meals, preferably before breakfast; but the stronger, more slowly acting cathartics should be given on an empty stomach before retiring."

While there may be numerous exceptions to these rules, yet they can be used in impressing on nurses the necessity of careful observation of the effects of medicine as it relates to food and its possible connection in producing vomiting or other gastric disturbance.

One phase of the subject is duly emphasized in training-schools—that nurses are not to prescribe; and we refuse to believe there is, or ever has been, in the history of nursing in America, any real reason for physicians to be greatly alarmed about nurses in general deviating from the narrow path in this respect. It is hard to get up any genuine sympathy with the resolutions concerning nurses that were unanimously adopted by the Congress for the Suppression of Illegal Practice. Regarding this resolution: “The programs of nursing schools, and the manuals employed, should be limited strictly to the indispensable matters of instruction for those in their position, without going extensively into purely medical matters, which might give them a false notion as to their duties, and lead them to substitute themselves for the physician.” Many will be in absolute accord with the need of confining the studies to the things essential or of practical value to a nurse, but with the reason given, lest they may “attempt to substitute for the physician,” they will absolutely disagree. The real reason is because there is so much that is essential for a nurse to know, in the limited time she has for study while in training, that she has no time nor energy left to make excursions into purely medical fields. There never was a fold in which there was not an occasional black sheep found, and so long as nurses are human, some nurse will, once in a great while, blunder in this respect, and need to be severely reproved. She will do this in spite of the fact that she knows better.

CHAPTER XIII

Teaching Bacteriology and Surgical Technic

How much should nurses be taught regarding bacteriology? There is clearly a great deal concerning the subject which they need not be taught—at least as undergraduate students. In order to render efficient service to the sick, the nurse need not be required to burden herself by attempting to penetrate into the mysteries of plate cultures, tube-cultures, or the manufacture of the various forms of culture-media. She need not know anything about differential staining, microscopic work, or the elaborate technic of a bacteriologic laboratory. She should know something of the general theory of the subject, something about bacteria in natural processes, of the conditions necessary for development and multiplication; something of how bacterial diseases enter the system, and how the germs of disease are thrown off in common communicable diseases. She should know how immunity may be secured, and should be thoroughly familiar with preventive measures. She should know something about the bacteria encountered in surgery; the principles on which aseptic surgery is based; the channels by which organisms may reach wounds; the principles of sterilization and disinfection. Beyond this she need not go in order to be a good, practical, intelligent, efficient nurse.

Just how long should be spent in acquiring this knowl-

edge, how many class hours are necessary, depends very much on who is to do the teaching, how clearly and concisely the necessary theory is presented. Bacteriology can be presented to probationers and junior nurses so that it becomes an intensely interesting study. It may be fired at them in such a manner that they will feel hopelessly confused and dejected, overburdened, either with a sense of their own stupidity or the teacher's, and carry from the class only a confused jumble of dreadful words which to them are utterly devoid of meaning.

Should it be taught by physicians or nurses, is another question that is sometimes asked. A physician who knew the practical needs of nurses along this line, and knew his subject thoroughly, should be in a better position to handle the study than a nurse, if he is able to put his knowledge into language which the pupils will readily comprehend.

As an illustration of how not to attempt to teach bacteriology, the following is cited: A physician, prominent in medical circles, had been invited to teach bacteriology to a class of beginners in nursing. The superintendent endeavored to impress on him the necessity of couching his lecture in the simplest possible language.

"Yes, ma'am," he replied, "I always use simple terms to express my thoughts. The cleverest men always do."

He began by entertaining the class by telling them of his surgical feats, of the many difficult operations he had performed, and the remarkable success that had attended them. Then he launched into the subject, and told them of all the germs he could think of that had been discovered, being careful to call each germ by its strictly technical name. He rolled these names off in such rapid

succession that the entire class gave up trying to take notes, and sat gazing at him with mingled feelings of curiosity, awe, and amusement.

"The *Staphylococcus pyogenes aureus*, where is its habitat?" he exclaimed in tragic tones. "Where is the habitat of the *Streptococcus pyogenes*, or of the *Bacillus coli communis*?"

Echo alone answered, "Where?" The class were too thoroughly awe-stricken to tell, if they had had any idea. After it was all over, and the man who "always used simple language" had gone, the superintendent, who was present, met the dejected-looking probationers, and explained what he was trying to talk about.

An introductory talk on the subject by a superintendent or head nurse, before the study of the text-book is attempted, will usually result in making the lessons which, at first glance, appear difficult, more interesting and decidedly easier of comprehension.

Acting on the principle that it is always wise, when possible, to begin with facts which the class know or have observed, and proceed in natural order to the unknown facts which it is desired they should grasp, such a preliminary talk might begin by a discussion of dust. Every pupil has observed the tiny floating particles of dust that show so plainly when a ray of light streams in through an opening in the shutter. They may not have considered that the air is always thoroughly mingled with these floating particles, though the particles are not always visible. The constituents of dust, the difference between the composition of the dust in the ordinary house and the hospital; the necessity of removing this dust, as far as possible, and of preventing it settling on wounds, dressing mater-

ials, or becoming mingled with foods; the soil and conditions necessary for the development of disease-producing bacteria; the functions of the good germs—these facts can all be presented in a way that will be clear and as fascinating as a story if the lecturer knows how to clothe facts in interesting story form.

Lectures on bacteriology are likely to be of very little use to nurses as compared with the plan of teaching by recitation from a text-book specially prepared for nurses. The student needs the printed page. If, at the beginning of the study of the subjects, tubes containing different germs in process of development in culture-media can be shown, it will help to make clear the methods of grouping and the conditions necessary for development, and will add interest. Laboratory demonstrations are always interesting and usually valuable, but because this is true, it does not follow that nurses should be obliged, in their probation term, to spend twenty-four class periods in a pathologic laboratory, making "a careful study of the more common pathogenic organisms, such as tubercle bacillus, the pneumococci and gonococci, and the germs of typhoid fever, diphtheria, and tetanus," as one modern training-school requires, or that the nurse will be any more efficient in the sick-room because of the twenty-four class periods spent in the pathologic laboratory.

This is another example of a good method carried to extremes. No one believes that this amount of experience in a pathologic laboratory will do her any harm, of necessity, but will it do the nurse any good? Has she time for it? Is it necessary? Are hospitals under obligation to furnish this amount of instruction to nurses in pathologic laboratories? If so, what of the hospitals

that have no such laboratories connected with them? Must they also provide for this laboratory training in some way? Is it one of the real essentials of nursing? If it is necessary for one class of nurses, it ought also to be necessary for all. If it is not necessary for all, why should it be required of any? These are all practical questions that suggest themselves at this point, and deserve to be considered by hospital people in general.

A method that always teaches a valuable lesson is to take the scrapings from beneath the finger-nails of some members of the class, both before and after hand disinfection has been attempted, and by means of culture-media show how dangerous this matter is. Another practical lesson is sometimes taught by putting a piece of sterile gauze, smeared with pus, into a room about to be fumigated, and afterward testing to see whether disinfection had really been accomplished. Some emphasis may be placed on disinfection of typhoid stools, and the conditions that weaken the power of the disinfectant used or render it inert. A great many people believe that much of the so-called typhoid disinfection is simply going through the motions. In a great many cases the disinfectant is weakened by the presence of urine, or a considerable amount of fluid, or the matter is consigned to the sewer before the disinfectant could possibly disinfect.

In teaching nurses the necessity of keeping surgical dressings, appliances, wounds, etc., covered so as to prevent the entrance of dust, the following experiment, which does not require a pathologic laboratory apparatus to make the trial, has been used. Before the lesson in theory begins two potatoes, two knives, two forks, two plates, and two small basins or bowls have been placed

in an instrument boiler, and thoroughly sterilized by boiling. In the presence of the students, one potato is removed from the boiler with the sterile fork, laid on the sterile plate, cut in half with the sterile knife, and immediately covered with the sterile bowl. The other potato is handled in the same way, except that it is not immediately covered. It is left, for a half-hour or more, exposed to the air and floating dust, then covered, and the two sets of material are locked up for a week or until the next class on the subject is held. It will usually be found that the potato that has been exposed to the dust after sterilization will show a large number of colonies of germs in course of development, while the other will be comparatively free.

As an introduction to the teaching of surgical technic, this experiment and the test regarding the scrapings from beneath the finger-nails will prove valuable and yield good results.

With almost any of the numerous text-books on surgical technic as a basis it should not be difficult, after the first principles have been grasped, to teach the details of practice, and help each nurse to acquire a good system that can be carried out in a private home even of the meanest type. All nurses will not become equally good surgical or operating-room nurses. All nurses will not remember, nor observe, all the principles of surgical technic which they are taught, but it is safe to say that no nurse will ever acquire a good technic that will render her absolutely safe to be left in charge of an obstetric or surgical patient, unless it is built on the foundation of a simple working knowledge of bacteriology. She must be taught the "why" of things to a certain extent, or a great

deal that she is required to do, in a hospital or elsewhere, will not be properly done. A good surgical technic can never be acquired by repetition of a series of meaningless "do's" and "don'ts" with an aseptic application.

CHAPTER XIV

Teaching Obstetrics

How much should a nurse be taught regarding obstetrics? Considering that the average nurse who goes into private practice usually has at least five obstetric patients to one operative patient; considering that a nurse may be called the day after graduation to an obstetric case in which serious complications are present, and where two lives are in danger, it will readily be admitted that she ought to be taught a great deal about this branch of nursing. The hospital that sends her out with its diploma certainly has the responsibility of seeing to it that she is well equipped by efficient theoretic and practical instruction and experience to take the place as an assistant to the physician that a nurse who calls herself a graduate ought to take.

Regarding the conditions of obstetric training that exist in one of the largest cities, a writer* in 1906 made the following comment:

“Even today in all but perhaps one or two of our hospitals the obstetric ward is the cast-off, otherwise useless, portion of the general hospital; its equipment is made up of the old utensils of the surgical operating-room, cast off when the latter was fitted with new apparatus, and its technic is the surgical technic remodeled by the individual nurses to fit what they might think best meets the conditions.

* Mrs. Emma Koch, Superintendent Chicago Lying-in Hospital.

"The head nurse almost always has other duties combined with her obstetric work, her nurses are under her instruction but a few weeks, and usually for only a few minutes each day, the visits of the 'attending man' usually resemble a draft along the corridor, and her support and fountain of information remain the interne, who stays the long period of six weeks in the service, and whose place is filled by another equally well supplied with obstetric knowledge and an obstetric technic.

"It is no wonder, in view of these things, that the nurse leaves the obstetric ward with a feeling of relief and often disgust. She has worked hard, has learned little, has obtained no enduring methods, has seen no ideals of practice and has attained none.

"A crying baby means peppermint water and nothing else; an incubator baby is a nightmare of blue spells; a puerpera means nothing more to her than castor oil and external dressings, etc. She has not been taught to observe the daily changes occurring in the little being lying in the crib; she has not seen the earliest developments of the mind; the changes of the skin, of the intestinal tract, the circulation; the shape of head and body, and all the wonderful phenomena that go to make up life, and the preparation of the individual for an adult existence.

"She has not been taught to observe the wonderful workings of nature in the puerpera, the recession of the uterus, the changes in the lochia, the development of lactation, the fluctuation in the body functions.

"To her a labor is a long vigil of watching suffering, and a bewildered assisting at the delivery of the infant. The mighty occurrences in the labor are meaningless.

The mechanism of labor, the protection nature gives the mother against infection and hemorrhage, the change of the child's life from intra- to extra-uterine, all these are thrilling and magnetic stories, but a closed book to her.

"The grandeur of the science of obstetrics thus being unknown to the nurse, and the practice of the art being so desultory and unsatisfactory, the nurse regards her obstetric training as a necessary punishment, and usually resolves 'never to take obstetric cases when she gets out.'"

Whether this description would apply with equal truth to obstetric conditions and training in all cities may be questioned, but at least it affords food for thought.

When so many excellent text-books on obstetrics are available, there certainly seems no reason why nurses should any longer depend on the haphazard taking of notes while a physician lectures. Certainly any nurse who has been taught the underlying science of obstetric work, as given in De Lee's text-book, cannot enter on her real obstetric practice without some idea of "the wonderful phenomena that go to make up life," or the "wonderful workings of nature" in parturition and the puerperium. Somebody is certainly very seriously to blame if a nurse graduates without a good working knowledge of this subject. Even if affiliation with a well-equipped lying-in hospital is not possible, or if there is no obstetric department in the hospital, it is still true that obstetric patients are not confined to any locality. The nurse can get the theoretic instruction in the hospital, and the practical work in homes under the instruction of a physician. The difficulty lies not in lack of opportunity for wide experience, but in the lack of adjustment, and in the limitations we have been accustomed to place around our

training-schools under pressure from different sources. It is a sad commentary on our civilization, and also our nursing progress, when it can be said that children are born under indescribable conditions in many of our cities, without any intelligent care or assistance to a mother during the crucial period, and, on the other hand, that nurses are still being graduated without ever having had a chance, while in training, to wash a baby, to assist at a childbirth, or care for a woman during the puerperal period in a hospital or out of it. To assist at a birth and care for a mother and baby in a well-equipped hospital, with a sterilizer and instrument boiler and all the paraphernalia of a well-furnished delivery room, is certainly valuable experience. The training in the right way to manage the situation is very necessary and desirable. But to care for such a case in the cellar of a tenement building, without a basin in which to wash the nurse's or doctor's hands, or a towel to dry them; without a clean sheet to put on the bed or a clean gown for the patient; to manage such a case so that the mother may make a good recovery and the baby a good start, is a far greater achievement.

In writing on the ideal obstetric training for nurses, Dr. A. Worcester, in "Boston Medical and Surgical Journal," has said: "Obstetric nurses should be expected to exercise precautionary surveillance during the pregnancy; to manage the first stage of labor; to recognize any abnormal occurrence; to be able to conduct a normal labor; to apply appropriate preliminary treatment in emergencies, and in confinement to care for both mother and baby intelligently. The ideal education of the obstetric nurse includes still more. She must be taught how to fit in most helpfully in homes where the mother is

under temporary eclipse; to save unnecessary expense, and to make the family, and even the servants, her friends."

In arranging a clinical demonstration of methods to be used in obstetric nursing, there is room for plenty of originality to express itself. Among other things, how to prepare for a normal labor, how to wash and dress a baby, the dressing of the cord, the care of the mouth and eyes, massaging of the mother's breasts, the use of the breast-pump, the application of abdominal and breast binders, should be included. Some very excellent points for such a demonstration may be obtained by a study of the numerous illustrations in De Lee's "Obstetrics for Nurses."

CHAPTER XV

Teaching Gynecology

How much should a nurse know about the diseases peculiar to women? A physician was asked by a nurse, some years ago, whether he knew of any book on the subject of gynecology that would be valuable for her to read. He was an eminent gynecologist. She was caring for his patients before and after operation. He frankly told her that a nurse did not need to know anything about gynecology. There is certainly a great deal connected with the subject with which a nurse need not concern herself, but, with all due deference to the opinion of the eminent gynecologist, there is a good deal that she does need to know.

First, she needs to know something of the anatomy of the parts concerned in gynecology and their relation to each other. She can be a very efficient nurse if she never hears of the pampiniform plexus, the infundibulopelvic ligament, if she cannot "describe the arterial supply of the uterus" or remains ignorant of hundreds of other such points, which some modern physicians attempt to teach her in the belief that "it is nice for her to know all these little details." She need not even know all the names applied to the great variety of diseased conditions of the organs concerned, but she should know something of the commoner diseases with which she will have to deal. She should be taught, in an elementary way, something

regarding the diseases of the external genitals and vagina, something about venereal diseases, something regarding injuries to the pelvic floor and perineum, something regarding disturbances of functions. The disturbances of menstruation should be given special attention.

Another point that has been emphasized in recent years, and properly so, is the necessity of an earlier recognition of cancer of the uterus. Progressive physicians, in view of the prevalence of this disease and the impossibility of dealing with it at all successfully after a certain stage has passed, have insisted that nurses should be instructed thoroughly regarding the earlier manifestations of the disease; that they should use every opportunity to instruct women in general regarding these early signs and the importance of prompt treatment. They urge that nurses should do what they can to save women from wasting time on quack remedies until all possibility of a cure has passed. Dr. S. M. Hay, in a lecture to nurses in Toronto, has stated very clearly and concisely the following facts which nurses should know regarding this disease:

“That the four symptoms that stand out prominently in cancer of the uterus are: Hemorrhage; discharge (leukorrheal or watery, and these may precede the hemorrhage); pain; general constitutional symptoms.

“1. That cancer of the uterus is prone to occur between the ages of thirty-five and fifty-five. It may, in exceptional cases, come earlier or later.

“2. That it is a local growth at first, and curable in its early stages.

“3. That irregular and unusual uterine bleeding at any time of life, but more especially between the ages of thirty-five and fifty-five, is a symptom requiring investigation.

"4. That the return of the flow, after the establishment of the menopause, is one of the gravest of symptoms.

"5. That leukorrhea is a symptom of diseased condition requiring investigation, but too frequently neglected.

"6. That change of life means cessation of menstruation, and that increased flow at a time when menstruation is expected to cease is a danger-signal.

"7. That pain is a symptom that appears late, and should not be expected or looked for as a sign of cancer in the early stages."

Lectures on gynecology should be given by physicians, but there is a good deal that a nurse ought to know about such work as gynecologic nursing that she will not know thoroughly and properly unless a head nurse or superintendent teaches it. Unless a doctor has at some time been a nurse, he is not likely to remember the multiplicity of details that enter into success in that branch of a nurse's work.

Perhaps, next to bed-making and the general care of a patient, to give a vaginal douche will be one of the nurse's first duties in a gynecologic ward. Before a nurse is ordered to give a vaginal douche she ought to know something of the requirements of a douche, its value as a remedial agent, the amount of fluid needed, the temperature, position, duration, and something of the objects it is supposed to accomplish. With all our boasted progress, there are still nurses being allowed to graduate after a three years' course who have not been taught these simple fundamental principles. A nurse who had been admitted to a hospital for postgraduate training was sent to give a douche to a patient by way of preparation for a vaginal operation. A few minutes before the clinic hour

the head nurse was amazed to find that the douche had been given without having removed a filthy, odorous tampon, the strings of which were plainly visible; indeed, the tampon was in the way of the insertion of the nozzle. This nurse was a graduate of a prominent hospital in one of the Central States—a hospital that would probably be registered without question because it is a general hospital, has over a hundred beds, a large proportion of them always occupied, and gives a three years' course of training.

Another point on which many nurses are weak is in not knowing how to place patients in the different positions for examination. Such examinations are too often conducted without any method on the part of the nurse, because of imperfect teaching at this point. A clinical demonstration should explain these points clearly to every nurse, so that she fully understands what her duties are under the circumstances. The methods of examination should be first explained. These may be classed, for convenience, into non-instrumental and instrumental. The non-instrumental methods include inspection of external genitals, external abdominal examination, bimanual examination, rectal examination. The class should be shown how to put a patient in the various positions for these examinations. A very sensible practical test of a nurse's progress along these lines would be to require each nurse at different times to put a patient in Sims', lithotomy, knee-chest, upright, dorsal, Edebohls', and Trendelenburg's position. She might be able to write down how it ought to be done, and yet not be able to do it promptly, properly, and with the least exposure of the patient.

The instruments necessary for instrumental examina-

tions, or for use in vaginal work in removing sutures from the cervix, etc., should be shown in this lesson. The difference between the spatular speculum, commonly known as Sims', and the bivalve speculum should be explained. Instruction should be given as to how to assist a physician in instrumental examinations. The preparation for an intra-uterine douche, how to arrange the patient, and help the doctor during its administration should not be overlooked.

If time allowed, or in a future lesson, the method of preparing a patient for gynecologic operations, both abdominal and vaginal, should be shown by practical demonstration, even if the regular nurses of the hospital are not required or allowed to do this work, or if it is always done in the operating-room. Another illustration from a postgraduate school will emphasize this point. A nurse in private practice came with a patient to the hospital as a special nurse. The case was one of multiple fibroids, to be operated on through the abdomen. The surgeon gave directions for preparing the abdomen—the shaving, scrubbing, compress, etc. The nurse was a graduate of one of the oldest, largest, and best-organized hospitals of the Eastern States. So far as the postoperative care was concerned, she was all that could be desired. But she was obliged to come to the head nurse and confess that she had never prepared a patient for operation and did not know just how to go about it. This happened a few years ago. Perhaps it could not happen now, but it serves to show the need of every superintendent making a business of seeing that her nurses get practical instruction along these lines.

Such a demonstration as has been suggested might

conclude with methods of preparation and application of tampons and adjustment of abdominal and perineal bandages. Not a few wounds become infected because the nurse either has not been instructed as to how to adjust such bandages, or because she neglects to keep watch that they remain in position.

CHAPTER XVI

Teaching Private Nursing and Visiting Nursing

Whether or not a pupil nurse should be allowed to gain experience in nursing in private homes during her training period has been a much-disputed question. There will, however, hardly be any dissent from the statement that the training-school owes it to the nurse to give clear, pointed teaching on the subject theoretically, teaching that will help her to enter on that line of work with some understanding of her place in the home, and what she may expect to encounter after she graduates if she does private nursing.

The requirements for this line of nursing are so decidedly different from the requirements for hospital work that it is little wonder that so many failures and misfits are recorded among private nurses. In the hospital the nurse is surrounded with all sorts of conveniences for her work; there is always some one who shares the responsibility, and her duties are fairly well-defined. In the home, all this is changed. It is true that experience in this, as in all lines of human activity, must always be the best teacher, and no amount of teaching could possibly prepare her for every emergency that might arise, but some instruction should be given.

Who should teach private nursing, and along what lines should this theoretic teaching be planned, are questions

that suggest themselves at this point. The instruction is best given by a nurse who is, or has recently been, engaged in private duty, and who is known to be a successful woman, with good common sense. No nurse whose experience has been chiefly gained in an institution can possibly appreciate the needs or the multiplicity of delicate points that arise in nursing in homes.

In beginning a course of instruction on this subject a few points may profitably be given a little special emphasis. It is just as true that special qualifications are needed, if one would achieve success in private nursing, as that they are needed for institutional work. The one requires methodic habits, a nice division of one's time between a number of patients, a careful observance of orders and regulations, a certain amount of speed in getting through with a number of duties according to prescribed methods, and with appliances of all kinds at hand. The other requires adaptability to all kinds of situations, a willingness to sacrifice personal convenience, a study of each patient and also his immediate friends and relatives and his surroundings, the ability to manage a domestic situation so as not to antagonize the people, and the willingness to do whatever her hands find to do, that will help toward the recovery of the patient.

There are two faults especially for which private nurses as a class have been severely criticized—extravagance in their demands and their unwillingness, as a class, to wait on themselves or to do what needs to be done for the patient outside of a certain well-defined list of so-called "professional duties." In the early days of trained nursing, when a nurse's social status was not well understood, it may have been necessary to keep the question of dignity

to the fore, to emphasize it on all possible occasions, and to be constantly on guard lest by doing this or that this dignity would be lowered, but it is not necessary any longer. A nurse who is a lady and has good common sense will not find herself embarrassed by doing any duty that presents itself. *There is nothing that needs to be done for the comfort of any patient which it is beneath a nurse's dignity to do.* That little point will bear repetition a good many times. A nurse can be just as dignified in washing dishes as in washing people's faces; just as dignified in sweeping a room as in sweeping the crumbs out of a bed; just as dignified in giving some attention to the children in the home who are well, as in attending to children who are sick; just as dignified in getting a meal for herself or for others as in preparing nourishment for her own patient. It depends entirely on the circumstances in which she finds herself. If her "professional dignity" will not stand the strain to which she is going to be subjected as a nurse; if it is going to be a hindrance to her usefulness; if it helps to keep her idle or causes people to want to get her out of the home as soon as possible, she is certainly better without it, or, at least, without so much of it. Some of the very best and most highly respected nurses in the land have washed patients' bedding, washed floors, washed clothing, cooked meals, attended stoves and furnaces, and acted as general house-mother when the mother of the family was laid aside by illness and there was no one else at hand to attend to these duties. The question as to what they washed did not affect the question of dignity or respect at all. There is material for a whole lecture on this one phase of the question.

Another lecture might be devoted to the equipment

which a nurse should provide and what may be improvised in homes to take the place of the appliances and conveniences she has been accustomed to in hospitals. The matter of economy of bed-linen is another phase of the subject that may wisely be elaborated.

The question of responding to calls is one on which nurses have widely differing ideas and standards of conduct. For the rank and file of nurses the policy adopted in this matter will weigh heavily in determining the amount of the balance that will appear to their credit on the bank account at the end of the year. Physicians have used this one point especially in deciding on a list of nurses whom they would employ on their cases. A nurse calls on a physician and leaves her professional card, signifies her willingness to respond to calls—any kind of cases. Later this physician has an urgent call, and in trying to secure a nurse meets with this kind of an experience: "Very sorry, doctor, but I never take children"; the next nurse does not care for a short case; the third never goes out of the city; the fourth does not care for contagious cases; the fifth wants to know if he will guarantee the payment; the sixth has made an engagement for the evening; the seventh has a headache and wants to know if tomorrow will do; the eighth never takes a short case under five dollars a day; the ninth has not her clean uniforms home from the laundry; and the tenth is sorry, but she is expecting a friend to call, and anyway she does not care to nurse children. This illustration is not at all overdrawn. As many as seventeen nurses have been called in trying to secure one for an emergency, and all these varied excuses are being offered to physicians every day. A physician who has met with such responses when

he sent a call to a nurse is likely to reduce materially the list he will call on the next time he has need of one.

This whole question of responses to calls, and when a nurse is justified in refusing a call, is a phase of the subject on which nurses need instruction, just as plain and explicit, as on any other line.

Another important point that should come in the lectures is regarding the keeping of appointments. A great many nurses seem to have very lax ideas on this matter. Questions of off-duty hours; of the relation to the other nurse who may be associated on the case; of the uniform, when it should, and should not, be worn; of arrangements regarding laundry; the adjustment of prices when nursing people of limited means; of when a nurse is justified in abandoning a case before its conclusion; of etiquette when nursing in hotels and public places—all suggest themselves as phases of the subject that should be included in a course of lectures on private nursing.

A good method in teaching is to have one or two practical problems in private nursing to give the class for consideration to be discussed at the next lecture or class. For instance: A nurse has made an engagement to nurse a maternity patient about the first week in October; no definite date is fixed when her services are to begin. The patient has stated that she will need her for two weeks. The last week in September the nurse receives a call to nurse a typhoid-fever case that will probably last from four to six weeks. Is she justified in taking the typhoid-fever case and giving up the other one?

A typhoid-fever patient required the attention of a second nurse for about ten days. Then delirium subsided and convalescence began. But one nurse was needed.

The family preferred the second nurse who was called, but feeling that the case rightfully belonged to the nurse who was called in the beginning, the second nurse was allowed to go. The day after the second nurse left the first nurse received a call to another typhoid-fever patient which promised to be a long case. She left the family without any nurse, left also a bundle of soiled clothing to be washed at the expense of the family and sent to her. Did she act honorably and squarely with that family?

A physician calls a nurse to a case. In a few days the family become dissatisfied with the physician, dismiss him, and call another. The second physician criticizes past treatment and appears dissatisfied with the nurse's methods. She knows he would prefer to have another nurse, but the family seem satisfied. What should she do?

A nurse on a private case was given an order by the physician in charge to give a dose of a certain medicine. The order was written. The nurse read the order and asked if she read it as he meant it, as she recognized that the dose ordered was above the maximum dose. The physician repeated the order verbally. The nurse felt she did not dare to suggest that it was an overdose. She gave the dose as ordered and the patient died from the effects of the drug. Was the nurse responsible?

When a nurse has notified a physician or a registry that she is "on call," what restrictions does she thereby place on herself in regard to personal or social engagements or plans?

These are practical questions which can be multiplied indefinitely by any teacher who knows much of the private nursing situation in America; they are questions that will be well worth giving to pupil nurses for consideration.

VISITING NURSING

The field of visiting nursing is one which is certain to afford employment for an increasing number of nurses as the years go by. An erroneous idea has prevailed, both among nurses and the laity, that any one who had a kind heart and a knowledge of nursing was fitted to become a visiting nurse. Without any clear idea of what was involved in such work, nurses have taken it up "just for a change"; "because they wanted to be out-of-doors more"; "because they were tired of private nursing"; "to see if they would like it," or for various other similar reasons. The association that employed them was obliged to teach them the very A B C of visiting nursing, or to turn them at large, if it was a new work, to find out, the best way they could, how to do what seemed to be expected of them. After a few months the nurse discovers that she is in the wrong place, that she is in no sense of the word fitted to meet the demands on patience and perseverance, wisdom and ingenuity, courage, human strength, and resourcefulness, and she drops out and another nurse offers herself who may be just as much confused as to the requirements, methods, and purposes of the work. This would not happen quite so frequently if training-schools placed seriously before their pupils the needs of such work and the kind of women who are fitted for it. No line of nursing calls for more superior qualifications than does visiting nursing. The visiting nurse has to deal not only with patients as seriously ill as those in hospitals, but she has to endure the added disadvantages of bad sanitary surroundings in many cases, the pinch of poverty, lack of conveniences, the prejudice and superstition of the ignorant

poor, and very often to do her work surrounded by a group of curious neighbors. She must be able to meet emergencies of all kinds in these unfavorable surroundings, and so manage the situation that, in spite of drawbacks, the patient will have a good chance for recovery. She must be able, on short notice, to adapt her surgical technic to tenement-house operations, and out of the meager furnishings and appliances, in the midst of the dirty, unsanitary surroundings, prepare for an operation. During the operation she may be the sole assistant to the physician, and have to assume duties which, in her training-school days, were divided between two or three others. She must not only be a skilled nurse, thoroughly familiar with the details of baths of all kinds and other hydrotherapeutic procedures, with treatments of every conceivable kind for chronic or acute medical cases, but must be equally skilled in the management of surgical, obstetric, and gynecologic patients. She must know how to readjust splints, extension and orthopedic apparatus, must have the art of bandaging at her fingers' ends, must know also how to prepare an appetizing meal at small cost. She must know the charitable resources of the city, the functions and limitations of the different institutions and organizations—not only those that deal with the sick, but must be familiar with helpful agencies of all kinds. She must have her faculties of observation highly trained, must know something of the laws of the city or community regarding sanitary matters. She requires infinite tact and judgment, not only in dealing with the poor, but with other workers in the field of charity. She needs, also, a certain amount of knowledge of the principles underlying scientific charity, though she herself is not expected to dispense alms except in case of dire necessity and emer-

gency. She is often required to act, not only in the capacity of nurse, but must be nurse, probation officer, tenement-house inspector, financier, cook, and general manager of the poor man's home and interests all at the same time.

Inasmuch as her best work will be in helping and teaching how to prevent sickness, she must be "apt to teach"—must be able to bring intelligence to bear on ignorance, superstition, and prejudice, and patiently and kindly labor to bring about better standards of life and living in the homes which she enters.

If pupil nurses can be given a clear view of what visiting nursing means while they are in training, they will be less likely to rush thoughtlessly into it, to their own detriment often as well as to that of the poor whom they attempt to nurse. If, while in the hospital, they have the opportunity to acquire a couple of months' experience in the actual work, it will be a valuable period in their training. This opportunity is afforded in a number of hospital training-schools. Apart from the advantages to the nurses in giving them a wider outlook on life and a better knowledge of its problems, there are advantages from the hospital standpoint and a larger number of hospitals in future will, in all probability, discover these advantages.

If the pupil nurses can be sent out under the direction of a supervisor till they have gotten over the first bewildering and discouraging experience, it is certainly the best way. If this is impossible, there should be most explicit teaching before they are sent out, and they should be required to report at least twice a day at the hospital to some experienced nurse who understands the needs and is able to give advice and direction regarding the great variety of questions that arise.

CHAPTER XVII

Specimen Examination Papers

DIETETICS

1. What do you consider the three most immediate necessities of life?

2. Define food. From what sources do we obtain proteids, salts, fats?

3. Why do you consider a mixed diet advisable?

4. What articles of food would you exclude from the general diet of an invalid that might be allowed to healthy people, and why?

5. Give a list of foods that contribute material for—(a) tissue-building; (b) force and heat.

6. Explain the terms carbohydrate, protein, casein, gluten, myosin, albumin.

7. Give a list of eight articles of food for a simple dinner, planned so as to include all the important food ingredients, and tell in which dish the greater amount of each is contained.

8. What are the uses of—(a) water; (b) fruits, in the body?

9. How should tea be made, and what is its value as food?

10. What fluid food contains the most nutriment? Give four ways in which it may be served. How would you alter it in case of weak digestion?

11. How should starchy foods be cooked?
12. Prepare a daily menu for a patient on a farinaceous diet.
13. What are the chief ingredients of eggs? How would you prepare and serve a soft-boiled egg, a scrambled egg, albumin-water? State some conditions in which eggs should not be used.
14. How would you prepare beef-broth, and what is its nutritive value?
15. Describe the proper method of preparing dry toast, coffee, and beefsteak for an invalid.

PRACTICE OF NURSING

1. What general care would you give a bed patient every day in the absence of orders?
2. State the measures you would use to prevent—(a) bed-sores; (b) infection of a bladder by catheterization.
3. What care would you give a typhoid-fever patient? Include in your answer general management of surroundings and bed, excreta, mouth, diet, baths, and precautions against hemorrhage.
4. How would you give a nutritive enema? Answer must be given in detail.
5. What are the uses of the vaginal douche and how should it be given? What conditions modify its effects?
6. Describe your method of administering a turpentine stupe, a cold pack, a mustard foot-bath.
7. What precautions would you use in the administration of medicines in general? What special precautions in giving sedatives?
8. How would you—(a) dust a hospital ward? (b) dis-

infect bed-pans and urinals? (c) disinfect a clinical thermometer while taking temperatures in a ward? (d) care for soft-rubber catheters after using? (e) care for a hypodermic syringe?

9. What facts would you consider it necessary to find out about a new patient during the first six hours he was in your charge?

10. Describe your method of giving a cleansing bath to a bed patient?

11. If a maternity case had a chill, what would you suspect and what would you do?

12. How would you place a patient in a Sims, dorsal, lithotomy, knee-chest position?

13. Describe your method of hand disinfection.

14. What degrees of temperature would you consider alarming in a case of typhoid fever?

15. State the simple measures you would use to check vomiting after anesthesia.

BACTERIOLOGY

1. Explain the terms bacteria, micro-organisms, saprophytes, parasites.

2. Who was the first physician to ascribe to micro-organisms the power to produce disease?

3. Write short notes on the works of Pasteur, Lister, Koch, Eberth.

4. What work is done by bacteria in nature?

5. What conditions are necessary for the growth of pathogenic bacteria?

6. Name the channels by which disease-producing bacteria may enter the human system.

7. What general precautions would you use in a hospital ward to prevent infection?
8. Why do not all germs grow and multiply that gain an entrance to the human body?
9. Name the germs commonly encountered in surgery.
10. What do you understand by the terms "immunity," "period of incubation," "phagocytes"?
11. What do you understand by Koch's circuit?
12. How are disease germs thrown off in the following diseases: Diphtheria, typhoid fever, tetanus, tuberculosis, yellow fever?
13. What conditions may modify the power of disinfectants?
14. Describe a method of disinfecting the hands.
15. How may infection reach a wound?

ANATOMY AND PHYSIOLOGY

1. Define the terms physiology, anatomy, alimentary tract, lymphatics. What is a gland?
2. Name the chief systems of organs, giving the names of the various organs in each system.
3. What is the spinal canal? Describe the general arrangement of the ribs.
4. Describe the composition of bone, the structure of muscle. What is a tendon?
5. What are the functions of—(a) the blood; (b) of bile? What are the uses of water in the system?
6. What are the functions of the kidneys and bladder?
7. Describe the skin. What are pores, sebaceous glands?

8. Name the principal digestive fluids. What changes take place in the food when exposed to each fluid?

9. Give a summary of the process of digestion.

10. What is absorption? What parts of the body are concerned in it?

11. Differentiate between lymph, chyle, and chyme.

12. What is the function of the thoracic duct? Where is it?

13. Describe the general structure of the brain. How is it protected?

14. Write short notes on waste and repair, the spinal cord, the nervous system, the liver.

15. Next to water, what is the most abundant substance in the urine?

MEDICINE AND MATERIA MEDICA

1. State five ways in which medicines may be administered.

2. In the absence of definite orders, what rules would you observe regarding the time of giving medicine in its relation to food?

3. Name two drugs that cannot be dissolved in water. How would you give them?

4. What special precautions are to be observed in giving medicine by hypodermic injection?

5. Give the average adult doses of the following: Tinctura ferri chloridi, sodium bromidi, chloral hydrate, nux vomica. What effects would you expect from each? How would you give them?

6. Name three preparations of opium. What effects on respiration and secretions are produced?

7. Name three drugs that are usually given after meals; three usually given before meals.

8. What are the uses of mustard?

9. Name three cathartics. State whether the action is mild or severe. How would you give them?

10. What rules should govern nurses regarding the prescribing of drugs?

11. If obliged to act in an emergency, what is the largest dose of the following that you would give: Morphin sulphate, strychnin sulphate, nitroglycerin, epsom salts?

12. What drugs sometimes produce a rash?

13. How would you calculate the dose for a child?

14. Name three drugs that may be given by inhalation. How would you provide medicated steam for a case of croup?

15. What do you mean by "anesthetic," "diaphoretic," "sedative"?

SYMPTOMATOLOGY

1. What do you understand by the terms objective and subjective as applied to symptoms?

2. Give a definition of pain. Explain the terms reflex, spasmodic, paroxysmal, as applied to pain. Describe the kind of pain you would expect in the formation of an abscess in the breast.

3. (a) What degree of temperature would you consider alarming? (b) If a sudden drop in temperature occurred in a typhoid-fever case, what would you suspect and what would you do? (c) What in a recent operative case?

4. What are the prominent symptoms of inflammation?

5. In nursing a pneumonia case what symptoms would you regard as favorable? What as unfavorable?

6. What conditions have a modifying effect on disease and its manifestations?

7. In a critical inspection of a patient, what points would you note?

8. (a) If the eyelids are swollen and puffy, what organs would you suspect were affected and what results would you fear? (b) If this condition occurred in a pregnant woman, what cause would you suspect, and how would you investigate?

9. What organic disease would you suspect if a patient were found frequently cyanosed?

10. Write a short paper on the skin, describing its appearance in health, and some conspicuous changes that take place in it in certain diseases.

11. Of what diseases may chills be a premonitory symptom?

12. In taking charge of a new patient, what points would you note about mental condition, facial expression, eyes, lips, mouth, tongue?

13. What observation would you make regarding cough and sputum in a case of supposed incipient tuberculosis? What in a more advanced stage?

14. What position in bed would a patient naturally assume in peritonitis, colic, pneumonia of the right lung?

15. What may a nurse observe that will be of value in determining the condition of digestive organs?

SURGICAL NURSING

1. What do you understand by the terms surgery, dislocation, sprain? What simple treatment would you use for the latter?

2. In the absence of definite orders, how would you prepare a patient for hysterectomy?

3. Describe your method of managing shock if left to your own resources.

4. State the symptoms of internal hemorrhage. What would you do in such a case, after laparotomy?

5. What precautions would you observe in nursing a case of empyema after operation?

6. In caring for a patient after nephrorrhaphy, what special precautions would you use?

7. What symptoms would you particularly notice in the first three days after an operation for intussusception?

8. How would you prepare for intravenous infusion? What physiologic effects would you expect it to produce?

9. Define the terms ligature, suture, drainage-tube. Name one substance used for each, and state how it should be prepared for use.

10. Describe your method of sterilizing rubber gloves and the care after use.

11. What articles would you provide for the use of the anesthetist during an abdominal section?

12. What instruments would you prepare for an operation for strangulated hernia?

13. How would you prepare the following solutions: carbolic acid, 5 per cent.; lysol, 4 per cent.; creolin, 3 per cent.?

14. What conditions may cause a rise of temperature after operation?

15. Prepare a paper, not exceeding 500 words, on the complications of wounds.

GYNECOLOGY

1. What are the principal organs and structures concerned in gynecology? Locate the internal organs of generation with relation to each other.

2. State the functions of the uterus, ovaries, Fallopian tubes.

3. Define the terms puberty, menstruation, menopause, cyst, vagina, vulvitis, amenorrhea.

4. What physical changes take place at puberty in the female?

5. What do you understand by subinvolution of the uterus and what may cause it?

6. What advice would you give a woman regarding her method of managing a vaginal douche in the home?

7. How would you prepare gauze strips for packing the uterus and how long are these usually left in place?

8. What diseases or displacements frequently follow laceration of the perineum, and how may these affect the general health?

9. Name the early signs of cancer of the uterus.

10. How would you care for a patient after perineorrhaphy? after Alexander's operation?

11. Write a short paper on gonorrhea in the female, stating causes, symptoms, parts involved, precautions to be used.

12. Name six causes that may result in amenorrhea.

13. In case of threatened abortion, what preventive measures would you use?

14. What are tampons? pessaries? Why are they used? How would you prepare each for use?

15. How would you prepare a gynecologic patient for

a non-instrumental examination, abdominal and vaginal? How would you assist the physician in an instrumental vaginal examination?

OBSTETRICS

1. What advice along hygienic lines would you give to a pregnant woman?

2. State the symptoms you would expect to find in a case of pregnancy at the end of the third month.

3. Explain what is meant by the term normal labor. How may a nurse tell that labor has begun? Explain the meaning of "stages of labor," and tell when each stage begins and ends.

4. When should ergot not be used? When is it usually used?

5. How would you prepare the patient and the room for delivery?

6. What simple measures may a nurse use to lessen the patient's discomfort during the early stages of labor?

7. In the absence of a physician, how would you manage a case of normal labor?

8. How would you deal with a case of postpartum hemorrhage?

9. What instruments would you prepare for a perineorrhaphy?

10. What measures would you use in case of asphyxia in the infant?

11. How would you endeavor to prevent fissure of the nipples? What care would you give after the fissure had formed?

12. Through what channels, and from what causes, may puerperal infection occur?

13. State the common causes, symptoms, and preventive measures of mastitis.

14. What special preparation would you make in a case of premature birth and how would you manage the premature infant during the first week?

15. Prepare a bill of fare for the first four days following confinement.

URINARY DISEASES AND URINALYSIS

1. Locate the kidneys, ureters, bladder.

2. What is the average quantity of urine passed in twenty-four hours by the normal adult? What conditions in health may modify this amount?

3. Explain the terms "suppression" and "retention" as applied to urine.

4. If retention occurred in an obstetric patient following delivery, what measures would you adopt to relieve before resorting to catheterization?

5. Why is it necessary to measure urine preceding and following a surgical operation under general anesthesia?

6. What changes would you expect to find in the urine voided in the first forty-eight hours after laparotomy, and why?

7. Define cystitis. How may it be caused and avoided?

8. Describe your method of catheterization.

9. How would you irrigate the bladder? how prepare a specimen of urine for analysis?

10. What changes are likely to occur as regards quantity in the urine in the early stages of acute fevers, hysteria, alcoholism?

11. Explain what you mean by specific gravity. What

is the normal specific gravity of urine, and how may it be determined?

12. What symptoms in a pregnant woman would lead you to suspect albumin in the urine?

13. Give two methods of testing for albumin.

14. Explain why it is sometimes necessary to catheterize a patient even when urine is frequently passed.

15. What general symptoms would you expect to find in a case of uremia?

HYDROTHERAPY AND MASSAGE

1. What general effects would you expect to follow from copious drinking of pure water?

2. What effects may be produced on temperature by external applications of water? What conditions modify these effects?

3. Describe two methods of using water for its sedative effects.

4. What physiologic effects would you expect from the injection of salt solution by hypodermoclysis? What advantage has this method of injection over the rectal method?

5. How would you give the following treatments: lavage, enteroclysis, vapor bath to a bed patient, sitz-bath, Scotch douche to a patient with synovitis in a private house?

6. How would you sponge a fever patient to reduce temperature?

7. Describe your method of giving a hot pack in a case of uremia.

8. How would you give a bath for its tonic effect?

9. At what temperature would you use the water for a hot full bath? How would you manage it, and what general effects would you expect it to have?

10. How would you apply a cold wet-sheet pack to a typhoid-fever patient? also a wet-sheet rub in case of general debility?

11. Explain what you mean by the term "massage."

12. What is the aim in using the stroking movement? What from friction and kneading?

13. Describe your method of giving massage for synovitis?

14. Name three conditions in which massage is contra-indicated.

15. How would you give a general massage, and what effects would you expect the treatment to produce?

DISEASES OF CHILDREN

1. What is the rate of pulse and respiration in the normal infant, and what conditions modify these rates?

2. What causes may produce variations in the temperature of an infant? What would you consider a pathologic temperature in a week-old infant?

3. What substance is lacking in the saliva of a new-born infant, and when may this substance be expected to be present?

4. State the average capacity of an infant's stomach at birth. Show why regularity in feeding is important.

5. Describe the feces and urine of the normal baby.

6. What is the best test of the suitability of the baby's food?

7. If the food is defective in quality, how would you expect it to affect the child?
8. What measures would you use to improve the quality and increase the quantity of the mother's milk?
9. Explain the term "marasmus," and give its symptoms and prophylaxis.
10. What are the chief causes of the summer diarrhea of infants? What advice would you give a mother with a view to its prevention?
11. In the absence of a physician's orders, what simple measures would you use in the care of a case of infantile diarrhea?
12. How would you manage a case of spasmodic croup, also convulsions, in a two-year-old child?
13. What preventive and curative measures would you advise a mother to use in regard to thrush?
14. How would you manage a case of measles?
15. Write a paper of about 400 words on constipation in infants.

DISEASES OF THE NERVOUS SYSTEM

1. Describe briefly the nervous system.
2. What are the functions of the spinal cord?
3. What are the general causes of diseases of the nervous system?
4. Show why diseases of the nervous system often interfere with the normal action of other organs, and give examples.
5. Explain what you mean by the terms neuritis, grand mal, petit mal, catalepsy.
6. What hygienic measures would you advise in a mild case of chorea?

7. What simple measures would you use to prevent and relieve wakefulness in children?

8. Explain what you mean by the term neurasthenia. What symptoms would lead you to suspect the condition?

9. Describe Weir Mitchell's rest treatment.

10. Outline a course of non-medical treatment for the relief of insomnia.

11. What do you understand by the terms illusion, delusion, incoherence, acute mania, dementia, melancholia?

12. Name some common causes that are believed to produce temporary insanity.

13. Write a short description of a case of hysteria which you have nursed, giving the general characteristics, and outlining the methods of treatment used.

14. What precautions would you observe in nursing a case of apoplexy in which coma was present?

15. What advice would you give along hygienic lines to a person afflicted with migraine?

THE HEAD NURSE



CHAPTER XVIII

The Head Nurse

If it be true that good nurses are born, not made, it is preëminently true of head nurses—those nurses who, having become proficient in the art of nursing and demonstrated their fitness for leadership, have had committed to their immediate charge a certain section or department of a hospital and the direction of other nurses.

The nurse who undertakes this responsibility and successfully measures up to it must possess not only the qualifications that are combined in a greater or less degree in good nurses in general, such as tact, patience, discretion of speech, love for her work, neatness, dignity, self-control, but must have, in addition, the executive force needed to plan for others and direct, must have a womanly sweetness combined with strength, a gentleness backed by will force, must have an infinite capacity for details, must be able to rebuke without arousing antagonism, must have a genuine poise of soul that will enable her to meet with sweetness and courage the emergencies that are constantly arising in a hospital having an active service.

The head nurse carries a fourfold responsibility. She owes to the hospital with which she has identified herself her allegiance to its highest interests. She owes to its authorities respect, to her associates in service the courtesy demanded of a lady. She owes to the institution the preservation of a discreet silence regarding its internal affairs,

such protection of its interests as her position enables her to give, no matter how antiquated, inefficient, or inadequate she believes its service to be. If she wishes to introduce change in method, she owes it to those who, in the final resort, carry the responsibility, to consult them before attempting to instruct those over whom she has authority to deviate from the methods in vogue.

She owes to the physicians, who stand in the relation of superior officers, her respectful adherence to their orders, and, as far as may be, to their wishes and preferences. She owes to each physician her loyalty—not loyalty to Dr. Jones and an utter disregard of Dr. Brown's interest. She can often, by a sentence, or even a shake of the head at the right time, undermine a patient's confidence in Dr. Jones, but she has no right to do it, even though she does not like the man nor approve of his methods. She owes to the attending physicians absolute silence regarding their professional demerits or blunders.

She owes to the nurses whose work and conduct she directs a careful attention to the details of their service, a study of their individual characteristics, an intelligent use of all the means at her disposal, that will aid in their development as nurses, and an example that will be safe for them to follow.

What the head nurses of a hospital are we may expect the pupil nurses to be. This is one fact that needs especially to be borne in mind when choosing nurses for such places of responsibility. If the head nurses are lacking in dignity, free and familiar in their relations with physicians, harsh or unsympathetic in their bearing toward the patients, we may expect to see the same qualities expressed in the daily lives of the nurses. It is not alone

a question of professional or executive ability; not alone what she can do, but what she is, that counts.

No nurse who has not learned the lesson of implicit obedience to authority, and practised it till it has become a habit of life, is fitted to command others. In a hospital, perhaps more than in most institutions, it is necessary for military discipline, military precision, military obedience, to prevail. This is one of the hard lessons for many head nurses to learn. It is difficult for them to measure accurately the degree of their influence upon others. Instead of creating in their subordinates a respect for authority, they manage to stir up questionings and doubts in the minds of pupil nurses as to the wisdom of this or that ruling. This is perhaps not often intentionally done, but, intentional or otherwise, the results are the same. The human tongue everywhere is capable of creating trouble unless controlled by principle, and the head nurse is in a good position both to create and to quell institutional disturbances.

The vital point at which many an otherwise capable head nurse fails is in the fact that she fails to see her place in the institutional situation clearly. She neither grasps its possibilities nor observes its limitations. It ought not to be necessary to remind a head nurse that she is not the superintendent, and that, above all, there must be one final authority whose methods must be followed and whose will must be law, if order is to be preserved, but this fact is frequently overlooked. This phase of the head nurse problem makes itself keenly felt where are grouped in the same hospital several head nurses who are graduates of different schools. Each believes her methods superior to those of the other nurses, and practises

them. If a steady, firm discipline is not maintained throughout the whole institution, confusion is sure to result. The pupil nurses, if taught by one head nurse that a thing must be done this way, by a second that way, and by a third a totally different way, soon become careless and think that "any old way will do," and who can blame them? This tendency among head nurses constitutes today one of the largest of the every-day problems of the superintendent. It is this one phase of the modern head nurse that leads many a superintendent to choose heads of departments exclusively from those trained in the institution, often to the detriment of the institution. There is no one hospital whose way of doing everything is the best known. The infusion of new ideas and new methods is desirable and cannot but be helpful, if it can be accomplished in the right way, after due consideration on the part of those in authority, and made a uniform practice throughout the institution.

Another great difficulty with many otherwise capable head nurses is their inability to see the needs of the institution as a whole. They become so engrossed with their own department that they allow themselves to get out of touch with other departments and with the general work of the hospital. If emergencies in other departments are allowed to affect them; if they are asked to spare a nurse temporarily to meet some unusual need in some other department, they forthwith feel that an injustice has been done them, and they cherish a personal grievance against the superintendent. This is no imaginary difficulty. It is all too deplorably real, and is making the problem of training-school discipline tremendously more difficult in many a hospital. It is often stated that one cannot

expect to get all the virtues combined in one person, but the virtue of unselfishness, of devotion to the interests of the institution as a whole, of justice and every-day kindness, should not be left out of reckoning when considering candidates for heads of departments. No nurse who gives unpleasant exhibitions of temper, or who feels that she is abused when asked to rearrange her plans, is fitted either to be intrusted with the care of a number of sick people or to command pupil nurses. An unwilling, selfish spirit, a spirit that rebels when called upon to meet the emergencies of hospital life, is not the spirit for successful leadership.

The head nurse should never be chosen from the class of nurses—unfortunately, a very large one—that considers a nursing education finished at graduation. The head nurse who never studies will soon find herself out-distanced by the bright nurses in training over whom she is placed. None are quicker to note narrowness and limitations and lack of ambition than students, and the nurse who has no taste or inclination for study will find it a difficult matter to retain the respect of subordinates. It is true that the distractions of hospital work and the responsibilities of the life are not conducive to systematic habits of study, but if head nurses are to become efficient teachers and leaders, they must take time to plan and prepare; they must have a general knowledge of what is being taught by others.

Further than this, the head nurse needs to study people every hour of every day to understand human weaknesses and motives, conditions and habits, if she is to be, in deed and in truth, mistress of the situation.

CHAPTER XIX

The Head Nurse and Her Patients

In the relation of the head nurse to the patients there is afforded ample scope for the practice of many of the highest womanly virtues. Not only will her attitude toward them have a decided bearing on the comfort of the sick, but her example and influence on the pupil nurses will be far-reaching in its effects. To the patients, and to the general public, the head nurse stands in the relation of hostess, and from her will be expected the same courtesy, the same thought for the comfort of her household, as would be given by a lady to a guest in her private home. In the manner of receiving patients there is room for improvement in many hospitals. Head nurses can help much by rightly impressing patients and their friends at the very beginning of their hospital experience; by showing them in numberless indefinable ways that the institution is a place in which the Golden Rule is practised; by teaching the nurses of whom they are in command to give special attention to the latest arrival—the bewildered, depressed stranger in their midst. Too often the entrance of a patient is a most mechanic performance. To the nurse, she is one more individual in the never-ending procession passing through the halls of pain, one more patient to write orders for, one more on the diet-list, one more bed filled or one more room occupied—that is all. To the patient it is one of the momentous experiences of life,

an experience dreaded, protested against as long as protests availed. Preceding the coming to the hospital has been, probably, the parting from friends, visions of dreadful possibilities, the shrinking from committing himself to strange hands. But to the nurses he is simply "a case," qualified in some instances by the word "accident" or "fever," or by the name of the attending physician, as "Dr. A.'s new case" or "Dr. B.'s operative case." But whatever the qualifying term used, the patient is a "case," his individuality or his state of mind at that time apparently being of very little consequence.

A few sympathetic reassuring words would mean more at that particular moment perhaps than at any other time in his life, but if the head nurse is too busy to speak them, if she has not trained her nurses to think of them, they will not be spoken. It is not enough that she teach nurses that the clothing of a new patient must be listed and put away, that his temperature must be taken and a bath given at the earliest opportunity; she ought to remember to put herself in the stranger's place, to teach her nurses that to allay the unspoken questionings and fears is as important as the mechanic work to be performed for the patient, and can be done quite naturally in connection with it. To tell a patient at the trying period of entrance, for instance, that nearly everybody who comes here gets well; that every one will do everything possible to insure a good recovery; that he will like the hospital when he gets over the strange feeling, may mean the difference between peace of mind and mental distress. The neglect of such details does not always mean an absence of kindly feeling, but rather a thoughtlessness on the part of the head nurse that is deplorable. The

very existence of the hospital reflects the desire of its founders and supporters and trustees to minister to human distress and bring comfort to the sick. It remains for the head nurse to interpret, in the truest manner possible, the real spirit of the institution. To neglect it, is to show clearly that she has a very imperfect understanding of the patients and their human needs.

It is needless to say that a firm, kind manner, a quiet dignity, must be maintained in all the intercourse with the patients. There is a tendency on the part of some pupil nurses who are by nature more talkative than others to talk more than is desirable to patients, to "visit" with them, and neglect other important and pressing duties. This tendency needs to be carefully watched and checked wherever manifested. A bright, cheerful, tactful, happy manner with patients is greatly to be desired in all nurses, but there is a danger, always present, of thoughtless nurses neglecting to notice the border-line between cheerfulness and familiarity, or mistaking when their duty to one patient ends and their duty to another begins. One of the common failings of pupil nurses is to neglect answering a call from one patient because they happen to be busy with another. There are, perhaps, few things which are more frequently complained of in hospitals than the neglect to answer bells, and nurses in general are only too prone to excuse themselves on plea of being "busy." An important part of their training ought to be the development of their ability to attend properly to the wants of a number of patients and keep all satisfied, to be busy with one and not neglect the other. There are nurses, hosts of them, who will be a success if given one patient, and a failure, or nearly so, if given two or three.

It is not wise to tell patients how busy you are. Don't give "busy" as an excuse for not answering the call promptly.

Much, however, can be done by training in developing ability along this line, a line on which the good reputation of a hospital frequently suffers. Who is there that is not familiar with the time-worn complaint of the patient who rang his bell for a half-hour, more or less, for a drink of water and then had to go without it? That very circumstance, trivial as it may seem to the nurse, weighs powerfully against the patient's friend coming to the hospital when a need arises.

Apart entirely from the discharge of the professional duties, or the treatments for individual patients, abundant opportunity is afforded for the head nurse to touch helpfully the inner lives of the patients. It may safely be inferred that many an adult comes to the hospital bringing with him, in addition to the physical disease, a burden of anxiety which may often be lightened by tactful management. A head nurse who knows how to listen helpfully to the recital of the troubles of her patients has gone a long way toward gaining the confidence without which no head nurse can do the best for a patient. While many sick people make heavy demands on a nurse's stock of patience, the same is true, and perhaps in a greater degree, of the patient's friends. With them, as with the patient, much may be gained by establishing proper relations at the beginning, and by a little tactful attention at the right time gaining their confidence. From them valuable information bearing on the patient's condition or peculiar tastes may be secured. If the head nurse can succeed in getting a patient's friends to come to her with any complaint or grievance, instead of carrying the tales of trouble to the office, or pouring them into the physician's ear, or recounting them to friends outside, she has earned

the gratitude of several people. This she will rarely succeed in doing unless she takes pains, on the entrance of a patient, to impress the friends with her genuine interest in, and sympathy for, the subject of their particular solicitude. If the neglect complained of is real, the patient's friends should be assured that all possible precautions against its recurrence will be taken and that real neglect will not be tolerated. If explanations are to be made, the head nurse is the person to make them. In nine cases out of ten a tactful head nurse can adjust the patient's difficulties better than any other person, since she is in immediate command of the situation, and it is presumed thoroughly understands it. To remove all ground of complaint and keep things running smoothly, with easily ruffled, petted, or unreasonable people, calls for a fine display of tact and resourcefulness.

There is another point in dealing with a patient's friends that needs to be handled sensibly, sympathetically, and carefully—a point in which much will depend on the nurse's judgment. To say that a disease is to have a fatal termination, that the end is rapidly approaching, and that the patient's friends should be notified, may not be her sole responsibility, but it is one which she must share. She is the person who will perhaps be the first to notice alarming symptoms, and while the raising of unnecessary alarm should be guarded against, it is infinitely better to summon the friends unnecessarily than to have the end come without having notified them that it was expected. This will happen in the best regulated hospitals sometimes. Sudden changes will come that are as much a surprise to the people in the hospital as to the friends outside; but no failure of the hospital is criti-

cized more than the neglect of this one point of duty. It is one of the hardest things to forgive, and will rarely be forgotten if it is forgiven. It will be told and retold in an attempt to prejudice others against the hospital long after the patient's name is forgotten in the institution.

Another delicate matter with which head nurses will often have to deal is the incompatibilities of disposition which arise between patients and nurses. When a patient takes a strong dislike to a nurse, it is, as a rule, no use to reason with him. Some adjustment must be made. It may seem an injustice to the nurse to remove her when she is apparently honestly doing her duty and trying to satisfy, but in reality it is a greater injustice to keep her in charge of a patient who, because of his dislike, will certainly misrepresent her, and if he is in a ward, will incite others to complain. Incompatibilities of temper and disposition occur very frequently even with people in health and with individuals who have much to divert their attention. It is, therefore, not to be wondered at that they frequently occur with the sick, with whom mistaken magnitudes are very common. It is never a good plan to argue with the patient who has taken a dislike to a nurse or who frequently complains of her, or to try to convince him that his grievances are imaginary. Then he will be certain that he has at least one real grievance, and that the head nurse has no sympathy with him. Let him understand that it is taken for granted that there has been ground for complaint, that the matter will be looked into and corrected. There are ungrateful, unappreciative people, and will be till the end of time—people who would try the patience of an angel. There will be nurses, while hospitals last, who will give cause for complaint wherever

they may be placed, while at the same time they may commit no flagrant misdemeanors and may do fairly well with some patients. Many disagreeable patients ought to be firmly dealt with by the head nurse, and often the mere calling their attention to their unreasonable demands, or to their conduct, will work a happy change for all concerned.

In a general hospital where no distinctions are made because of creed or color, situations calling for a high degree of tact and good judgment will sometimes arise when the question of creed or color has to be met. No woman with strong racial prejudices is well fitted for institutional life. A broad, general sympathy with the aims and objects of the institution, and with the entire class of patients for whom it was designed, is an important requisite in a head nurse.

The religious beliefs of patients are subjects with which no head nurse has a right to interfere, nor should any levity regarding the forms and ceremonies used by any sect be permitted among nurses. Complications regarding diets prescribed or forbidden by certain sects will occur, and must be met with a broad sympathy and tolerance. Few things will arouse more gratitude on the part of a patient than a practical expression of sympathy with his religious beliefs when he knew the nurse was not of the same belief. It is undoubtedly trying to have a patient's breakfast postponed till a certain rite has been administered; it is trying to admit clergymen at unseemly hours when perhaps the morning sweeping is in progress, or treatments of various kinds are going on. But we are not in the business merely to please ourselves, and when such things do occur, they must be met with courtesy

and patience and ready assistance. Such occasions to a patient in a hospital mean more than we can readily realize.

The daily life in a hospital affords unexcelled opportunities for the study of character. If it be true that "the proper study of mankind is man," then the head nurse has certainly a splendid opportunity to engage in proper study.

CHAPTER XX

Hospital Ethics and Discipline

From the time a nurse begins her career as a probationer in the training-school she should be given a clear understanding as to her relations to the institution, to its various officers, to nurses, and to servants. A copy of the rules regarding nurses should be furnished her, and any necessary explanations should be made at that time. This the institution owes to every probationer, but too often it happens that she is expected to learn rules by breaking them, or to get hold of them through the uncertainties of tradition. When a nurse has been told the rules, it is the business of the head nurse to see that they are enforced as far as relates to her department, and to coöperate with the superintendent in the maintenance of discipline.

It need hardly be stated that the head nurse herself should strictly observe the rules of the hospital, which are made with the good of all concerned in view; but, as a matter of fact, many head nurses are anything but good examples in this respect. Too many head nurses are a law unto themselves; too many of them resemble Kipling's heathen, of whom it was said: "'E don't obey no orders 'less they is his own," a most undesirable characteristic even in heathens. When it is found in a head nurse it bodes no good to the institution. If the house rules say "Lights in patients' rooms must be extinguished by 9 P. M.,"

that "nurses must not visit in the hospital proper while off duty," and the head nurse is found visiting in a patient's room at 10 o'clock at night, it is very likely the pupil nurses will soon get the impression that rules are not of much importance—not expected to be observed.

If the rules say that nurses must confine their conversation with internes to strictly professional subjects, must avoid all unnecessary conversation while on duty, and the head nurse sits at her desk and gossips about things in general for an hour at a time, how can pupil nurses be expected to have due respect for institutional regulations?

It has been said that discipline is the difference between an army and a mob. If even a measure of discipline is to be maintained, head nurses must be impressed with the necessity of teaching, both by precept and example, that rules are to be observed; that if, for any reason, it becomes necessary for a nurse to deviate from them, explanations or apologies are in order.

On the report of the head nurse will depend largely the acceptance or the rejection of the probationer, since she is in a measure responsible for her work and conduct, and is especially well situated to observe whether or not the candidate has in her the qualities necessary for a successful nursing career. Just here a word as to the need of patience with the probationer is in order. There are in our hospitals many head nurses who are in themselves capable workers, but who are utterly unable to see the promise or the possibility in a probationer who is slow in developing. With them either a probationer is a "jewel," or she is "good for nothing." There is no middle ground with them. They lack the power of seeing beneath the surface, of perceiving the diamond in the rough. Many

a nurse who has, later on, proved to be a tower of strength to institutions and to homes, an assistant most acceptable to physicians, and a true friend to the sick, has in the beginning been most unjustly dealt with because some head nurse did not see the use of bothering with her and reported adversely concerning her. Then, too, very frequently a nurse who has seemed to be a failure under the direction of one head nurse has done acceptable work when placed under the supervision of another. As a rule, the probationer who is slow in developing will be more likely to succeed in a small training-school, where she comes into closer touch with the superintendent; where there is greater opportunity to study individuals, and where the sterling qualities are not lost sight of, or obscured, by the brilliancy of some brighter candidates who do not always continue to shine so brightly when they get further on.

In the daily practice in the wards the head nurse will find abundant opportunity for teaching ethics, the branch of science which treats of human actions from the standpoint of right or wrong. In the past it must be admitted that much more stress has been laid on hospital etiquette than on ethics. Both are important, but a thorough understanding of hospital ethics will make it very much easier to teach the simple form of conduct or manners applicable to certain places or occasions.

After years of experience with nurses it has come to be a habit with at least one superintendent to emphasize first, in the theoretic teaching of ethics, the point of common honesty—"truth in the inward parts." And the simple practice of common honesty in a hospital every day will carry us far. Too many of our nurses come to the hospi-

tal with poorly developed consciences, or, as a popular writer has termed it, "fatty degeneration of the conscience." Whatever term is used, the fact is plainly in evidence that the matter of conscience-building has received scant attention in the homes from which some of our nurses have come. Perhaps it is true that many things are done from pure thoughtlessness, but there are times when thoughtlessness is criminal, and other times when it is positively inexcusable.

Accustomed to the freedom of a home, some nurses quickly forget that they are stewards of hospital supplies, that things intrusted to them for the use of patients are not personal property to be used or abused at will. There is a principle involved in the smallest transaction, but the principle will often be overlooked unless it is pointed out. Here the head nurse has a splendid opportunity to raise the whole moral tone of the hospital through her intimate contact with the nurses and by her own personal example.

The simple practice of the homely virtue of honesty will compel a nurse to own up when the breakage or destruction of an article occurs, but, unfortunately, the rule in many hospitals is that "nobody did it."

The practice of every-day honesty will keep a nurse from sneaking an egg out of the ward refrigerator over to her room to use in shampooing her hair. It will prevent her nibbling at the plate of fruit in the ice-box that belongs to some patient. It will keep her from appropriating for her own use articles of food or special delicacies provided for patients. These are homely illustrations of ethical questions, but any one who has lived in a hospital must admit that they are true to life; so true that some hospitals have had a special rule punishing with dismissal

any nurse found guilty of taking for her own use fruits belonging to patients or delicacies provided by the hospital for them.

The practice of honesty will compel a nurse to own up when she fell asleep on night duty, or when she kept her light burning after hours or came in late. The agreement on the nurse's part to keep the rules made when she applied or was accepted is very often quickly forgotten. There is no denying that the practice of simple honesty applied to every-day conduct will be far-reaching.

Next in the points to emphasize in the teaching of ethics might be mentioned the old-fashioned virtue of obedience; and the practice of obedience, like the practice of honesty, involves a great deal that is vital in the business of nursing the sick. It has been said that the average American girl of the twentieth century is ignorant of the first principles of obedience. Certain it is that the disposition to argue the point, to want to do it some other way, to ignore entirely what has been said, to think it makes no difference, to ask idiotic questions or to neglect an order because it is difficult to carry out, are all prominent characteristics of the girl of today who presents herself for training. To have a girl who will do exactly what she is told, in the manner in which she has been taught, without questioning or arguing, or who will promptly come and report that she finds difficulty in carrying out an order, is to possess a treasure whose value to the institution cannot be measured. She imparts a sense of security and confidence wherever she is on duty that is in striking contrast to the feeling of anxiety, of constant uneasiness, produced by some other nurses whom a head nurse never

feels she is sure of unless she is standing guard over them to keep them up to the mark.

In all hospitals will be found nurses who are unattractive in manner, nurses who are untactful, nurses who are indiscreet, nurses who are, sad to relate, not always truthful, nurses who are noisy and frivolous, while doubtless every one of them possesses some of the qualifications so desirable. Out of this imperfect and often unpromising material are to come the nurses of the future. The great majority come with very crude ideas as to what training really means. Most of them have grasped the thought that it means they are to be taught to do a great many things for sick people and to get through with a certain course of study; but that their own personal habits are to be interfered with has, perhaps, never occurred to them. Few candidates, if any, realize how much their own personality, their own manner, is to figure in their success. As a matter of fact, there is no line of work in which personality counts more. A patient may put up with rough, uncouth habits in a physician, and often, foolishly, think it a mark of genius or skill, but not so with the nurse. "It is a rare thing for a patient to ask me where I trained," said a nurse in private practice. "The majority of sick people know very little about hospitals or training-schools, but they and their friends knew whether they liked me or not, and, after all, that is what counts." She spoke truly. It is personality that counts everywhere. A pretty face is not a disadvantage, but it does not always imply a pleasing personality. What the physician wants is a nurse who has learned to obey, who can be trusted with the patient, and who will refrain from adverse criticism of him or his methods. What the patient wants,

what his friends want, is some one who will take in the situation and adapt herself to conditions, who will get along without friction, who will upset the plans of the household as little as possible, who will have a kind, cheery word for everybody, even to Dinah in the kitchen; who will see to her own patient's wants and wait on herself, who will not try to organize a miniature hospital and demand clean sheets every day; who will consider the drain on the finances of a family that sickness makes, and will, therefore, make as few demands as possible. It is the nurse who has learned to put up with the odd ways of people, to humor them when it makes no difference, the nurse who has learned to please, who is wanted.

There is a tendency, too, that needs to be watched against, for the nurse to be spoiled by the unstinted praise that is sometimes showered on her by friends when she has helped a patient successfully through a serious illness. The gratitude of patients and friends is one of the compensations that come to nurses everywhere, and ingratitude is always to be deplored. At the same time it is well to remember that "gush" may mean short-lived praise; that the patient who says little may often feel deep in his heart a sense of gratitude he cannot express. Further, the nurse must learn to do her duty, and to be satisfied many times with the approbation of her own conscience, to render service to the uncouth and unlovely, irrespective of appreciation or material rewards, if she is to be a real force in making this world a better place to live in and to die in.

There is another ethical point on which too stringent regulations cannot exist or too strict supervision be made—that is regarding the nurse's relations with men—the male

patients, the orderly, the porter, the patient's friends, the physicians, the internes—all men. Because this is a delicate subject to approach it is simply ignored in some hospitals. While all are ready to admit the importance of the question, yet it is the one thing that is not discussed fairly and openly by some superintendents with their head nurses and pupils. From the very first day of a nurse's career in a hospital she should be given to understand in unmistakable language that the thing required is that every nurse shall conduct herself so that she will be above suspicion inside the hospital and outside. The whole world is not desperately wicked, but there is a considerable portion of it that is desperately weak. It is just as well for superintendents to accept that fact without question. To launch a girl who has had little contact with the world as it really is on a hospital career, without warning her of temptations that will surely come to her,—temptations of which she has never before dreamed,—is a crime that, in the light of experience, is inexcusable. After a few years' experience with life as it is lived in a hospital nurses will be wiser about such things. In their early days they need to be guided by the wisdom of others, who have been over the road and know where they are likely to stumble or "make fools of themselves."

It is one thing to theorize about ethics, and handle the whole question as an abstract problem, or as we might discuss astronomy or any other far-away, shadowy subject. It is another matter entirely to handle ethical questions fairly and squarely, as such questions relate to every-day life and conduct, and to the people we have to deal with inside the four walls of any given hospital. Gladstone's prescription for many evils is very necessary—"A little

common sense." When, after plain warnings and admonitions, a nurse conducts herself in such a manner that she becomes subject for gossip or criticism because of indiscreet conduct where men are concerned, the sooner she is gotten rid of the better for everybody concerned. It is an injustice to self-respecting nurses, to the hospital, and to the profession to retain her and graduate her, however efficient she may be. What she is, is more important than what she can do.

The question of penalties for violations of rules is a big one, and one on which opinion is greatly divided. Taking away a nurse's cap is sometimes tried, but it does not seem wise to thus humiliate a nurse before the patients whose respect she must keep. The ranking system in some large hospitals, where no private patients are admitted, has been successful, but it could not be as successfully applied in smaller hospitals or hospitals with a large proportion of private patients. Each nurse is given her rank in the order of her arrival, such rank being observed in seating in the class-room, dining-room, assignment of work, etc. After the first examination the rank is according to results. Failure to come up to a certain standard of work is sufficient cause to place a nurse farther down the ranks; otherwise she is promoted as vacancies occur.

Depriving a nurse of her afternoon off for being late at breakfast, or late getting in, is advocated by some who have tried it. Sending a nurse off duty for lack of neatness or for boisterous conduct, and causing her to lose a half-day, impresses the lesson on her, and on the whole class, as hours of talking would not do. Failure to answer bells is one of the things that has to be constantly dealt with. For this offense suspension for a week has accomplished

what seemed impossible without it. No one wants to suspend nurses, but indifference to the calls of the patients is something that cannot be condoned. For omissions regarding orders some superintendents have tried the plan of calling the nurse to the office and requiring her to confess it to the physician. This has proved a more effectual way of dealing with it than letting him find it out himself, and perhaps pass it over without comment. It is all very well to theorize about "ruling by love," but in hospitals it has been found practically impossible to enforce regulations with some nurses until some penalty was attached. In debatable matters it is a pretty good rule to remember that what we would not want forty nurses to do we have no right to allow one to do.

When it comes to methods of maintaining discipline, a great diversity of opinion exists. It is undoubtedly true that methods that are highly successful in one hospital would utterly fail in another, or be impossible of adoption, because of the difference in the types of hospitals concerned. Also, it is true that the same nurse might require different treatment at various stages in her career. Successful discipline requires that nurses be dealt with as individuals. The probationer who arrived two days after the appointed time, or who spent a day in sight-seeing with her friends before reporting at the hospital, thinking it made no difference whether she started her course today or tomorrow or the next day, should be seriously talked to on the subject. The opportunity of teaching the necessity of obedience and punctuality, of showing how her failure to report on schedule time might disarrange the working of the machinery in various parts of the hospital, should

not be neglected; but if a nurse who had spent a year in the hospital came in two days late after vacation, she should be more severely dealt with. A good rule in some hospitals for this breach of trust is to require two days' extension of the training period for each day taken without permission.

One of the hard lessons to teach is the necessity of nurses regularly and frequently reading orders so that nothing is overlooked. Another point difficult to impress is that no order is to be omitted simply because it may be difficult to carry out, or that failure of one person to attend to her part of the work does not excuse another. So frequently a thoughtless nurse will make an attempt at carrying out an order, give it up without really accomplishing it, and say nothing about it. If a medicine ordered is not at hand, for instance, some nurses will feel at liberty to omit it, without reporting the occurrence at the time when it should have been attended to. Let this habit of omission become prevalent in a hospital, and how can a physician or a superintendent be sure that any order will be carried out? Inattention to orders in the army or in a railway system is the cause of numerous disasters. It is the same in the hospital. Such delinquencies should never be lightly passed over. In some hospitals a great point is made of the violation of rules regarding the time a nurse must be in the house or have her light out, while these weightier matters, that have to do directly with the sick, are too often passed over as common or unimportant occurrences. In the study of literature and rhetoric we found the point of due proportion was one of the important things emphasized. To have a proper sense of due proportion in dealing with

nurses' offenses and shortcomings is equally important to good results.

The nurse who has been told never to apply a hot-water bottle to a patient with the water hotter than 115° F., and in direct violation of a known rule fills the bottle with water at a temperature of 150° or 200° F., is a dangerous element in a hospital. If she burns a patient and the offense is lightly passed over, we may expect other nurses to become less careful. There are careless nurses; there are others whom we dare hardly with justice call "careless," but we must admit that in some things they are not sufficiently careful. The thing we want to do is to prevent the nurse who is "not sufficiently careful" from getting into the "careless" class.

At the very outset of a nurse's career, and at frequent intervals during her training, the fact needs to be impressed on her that it absolutely depends on herself whether she is to become a first-grade, second-grade, or third-grade nurse. That fact she absolutely controls. As a rule, she is inclined to blame the training-school for many of her shortcomings, and while the school has a decided responsibility regarding its nurses, it still follows that the girl herself becomes largely what she determines to be. If she is satisfied to do slipshod work; if she is lacking in thoroughness and punctuality and accuracy; if she is satisfied with mediocrity in her daily work, then she has no right to complain if she never rises above it.

Her real character is expressed in numberless ways of which she will be unconscious unless instructed. Her voice, her laugh, her conversation, her walk, her touch, her habits of dress, the expression of her face, all tell their own story and bear on the question of her fitness or un-

fitness for the work she has undertaken. While it is often a delicate and disagreeable task to call a nurse's attention to her own personal defects, it is certainly no kindness to her to disregard them. At the very time when a weakness is manifested is usually the best time to call attention to it. If frequent admonitions on the subject seem to be unheeded and the matter is important, it becomes a point to be reported to the superintendent, to be dealt with as may seem best for the candidate and the institution.

One of the first lines on which nurses need to be cautioned is regarding discreetness of speech, and this refers not only to affairs concerning the patients, but to the nurse's own private affairs. There are nurses who can never be trained to hold their tongues. They seem to have inherited a predisposition to "tell things," in spite of all that any one can do, just as, in the great world outside hospital walls, there are men and women foolish enough to even "tell that their father was hanged," when no one particularly cared how he met his death. The information was entirely uncalled for. Such people do aspire to nurse the sick, and they are bound to be a trial to the soul so long as the notion lasts. Then, too, there are nurses who come from homes in which any restraint of speech is unknown; their attention has simply never been called to the need of it. There are nurses who are foolish enough to relate their own private affairs, or their love affairs, to the nurse acquaintance of a day, or to the patient who is to them a stranger. Thus the question of tongues constitutes one of the problems of the training-school. Head nurses can do much by example, as well as by precept, in helping nurses to form those habits of reticence that will go far toward commending them to the confidence of physicians and people in

general. To be able to say that a nurse is a "safe" woman to admit into one's confidence is no uncertain commendation. No point needs more frequent emphasis than this. To send out nurses who know how to keep silent regarding their own or their patients' affairs without conscious effort, because of habits firmly fixed during the training period, is no small achievement. To train them to be ladies under all circumstances, to avoid practical jokes, undignified conduct, slang, and gossip is as important, surely, as a great deal of the technical knowledge that now seems to be demanded in a nursing course.

If all nurses could be given a thorough drilling in how to carry themselves and how to acquire a graceful walk it would be a distinct advantage to many nurses who have unconsciously allowed themselves to become round-shouldered or awkward and ungraceful in their general movements. No one who has seen the difference in the bearing and carriage and walk of the volunteer for the army before he enlisted, and the same man after he has had a few months of military drill, who has noted the erect carriage, the firm, even tread, can question the value of gymnastic drill and exercises in the training of nurses. Even without the formal drill much can be accomplished, given willing, teachable pupil nurses and tactful head nurses who will call attention to personal defects, and remind, and remind, and remind, until reminders are no longer needed.

"Study to be quiet," is a text that ought to be writ large and posted prominently in all our hospitals and training-schools. Have we really regarded it as a subject for study? Have we not, in hospitals, expected nurses to acquire habits of quietness by accident or instinct? Is this not one reason why we hear such frequent complaints from patients and

their friends about the noise in hospitals? It is true that physicians are very bad examples for nurses in this respect, that some internes are simply irrepressible so far as noise is concerned, but are head nurses as careful as they should be to teach habits of quietness, to demand it, and use all possible means to secure it? Unless nurses are trained to notice noise—preventable noise; unless their attention is called to the thousand and one points to be guarded against while engaged in active duty,—the banging of doors, the rattling of basins, the creaking of hinges, the noisy handling of chart-files, and, most inexcusable of all, their own voices, their own often unnecessary chatter, which keeps up a continual disturbance among sick folks,—they will certainly develop noisy habits that are bad for the hospital, bad for the individual nurse, bad for future patients, bad for everybody concerned. Have we not been far more attentive to such points as whether the bed-spread was on exactly as prescribed, whether the window-shades were all at a uniform height, whether the wash-cloths were in their exact places, than whether our nurses were needlessly tormenting the patients with their chatter and noise?

The habit of expressing appreciation of work well done, and of measuring and noting general improvement, is another point worthy of cultivation in the head nurse. There are comparatively few individuals who do not relish and long for a word of commendation, comparatively few who will keep up sustained effort to improve, if they think nobody notices or cares.

One other point may be mentioned on which head nurses need to be decidedly on the alert—that of allowing probationers or pupil nurses to criticize the management or methods in their presence. It is no part of a pupil nurse's

duty to plan or produce reforms in an institution. If they are wise they will soon recognize that to readjust themselves, to do faithfully, quietly, and efficiently the duties assigned to them, is the best way to improve a situation. If they have theories which they are burning to experiment with, and they prove successful in their own little sphere, the chances are that the opportunity to test their advanced theories will come to them sooner or later. The world is not slow to recognize ability, and it is badly in need of people who have in them the qualifications for leadership in any line.

When a nurse shows the disposition continuously to grumble and criticize; when her attention has been seriously directed to the fault with no sign of improvement, the quicker that nurse is gotten out of the hospital the better. However clever and capable a nurse may be, no institution can afford to harbor a girl who has a tendency to keep stirring up trouble, to keep seething, an element of discord that will poison the atmosphere and make her associates discontented and unhappy. There are some dispositions that can never accept sweetly the regulations of community life or get along comfortably with a lot of different kinds of people. There are incompatibilities that will always prove troublesome in institutional life, that have to be endured, but the active stirrer-up of trouble who feels called on to reform the place is a type that no superintendent can afford to keep if she values her own peace of mind or harmony in the school. Half the troubles that are experienced with discipline in training-schools would be avoided if pains were taken to ferret out the leading spirits in creating trouble and promptly get rid of them. No head nurse who really has the interests of a hospital or training-school

at heart can afford to shield or to keep silent regarding this class of individuals.

How to bring out the best that is in her nurses; how to strengthen their weak points, is one of the problems at which the conscientious, capable head nurse is always working. To do the best with them she must understand them, must try to see things from their standpoint as well as her own. She must be able to look beneath the minor fault or error, and appreciate the motive that prompts an act. She must aim at eliminating root defects, which, when righted, will generally correct minor failings. In the daily dealings with nurses and probationers she will meet some who will need to be spoken to in the most emphatic manner possible—fairly thundered at—if any lasting impression is to be made. She will have to deal with others, in whom the least suspicion of severity will break them up and unfit them for work. Some nurses, like some children, need to be held in, as it were, with bit and bridle; others can be managed by a look or a suggestion. Both kinds may develop into good nurses, but they need entirely different management in the developing process. To be able to rebuke without arousing antagonism is no mean attainment. To see the possibilities that are embodied in unpromising, blundering material; to detect the latent powers and help in their development, has its own reflex action, both broadening and elevating. Fortunate is the head who realizes the greatness of her opportunity, or who has inspired such confidence in her subordinates that they will, even while smarting under a reproof, realize that she had their highest good in view. The time will come in later years when they will appreciate at its true value their training and teaching, when they will regard as a blessing the discipline of their training-school.

CHAPTER XXI

Ward Housekeeping and General Management

In the general management of a large ward or a section of a hospital a head nurse will find ample opportunity for the exercise of both technical and executive ability. The nurse whose professional education has been built on the solid foundation of a thorough practical knowledge of housekeeping is, as a rule, better fitted to fill such a position than the woman without practical domestic experience.

It is not unnatural that a feeling of bewilderment should take possession of even the most self-possessed nurse who finds herself thrust into such a position in a hospital to which she is a stranger, but a couple of days in the place will make a decided change in this respect, and a couple of weeks ought to see the clouds disappearing entirely from her horizon. She should begin to see the situation clearly. From the very beginning the head nurse will do well, even though it may not be a rule in that particular hospital, to be always at her post when the nursing staff changes. Only thus can she be sure that the orders will receive prompt attention; that appliances used by the staff going off duty are all in their proper places; that the entire department of which she is in charge is in order; that the work for the next relay starts out as it should. The very fact that she is there and notices such details will have a good effect in keeping up standards of work.

To make a careful observation of the standing orders will perhaps be her first duty—the orders and rules that apply to her, those that apply to the nurses she will direct. After that will come the looking over the records and the details of the ward in general. It is well for her to understand that there is no detail that may pertain to the comfort of the patients or the general well-being of the ward for which it is not her business to be responsible—nothing so small that she can afford to be careless about it.

The periodic supervision of the condition of the beds is one matter that head nurses are inclined to overlook. It may as well be taken for granted that there will always be nurses who, regardless of how thoroughly they have been taught, will be careless about their bed-making if they are allowed to be. In beds on which the spread is straight and neat, beds which to the superficial observer appear to be up to the mark, it will often be found that three or four days after an operation the operating-room stockings are still in a heap at the foot of the bed, and the towel that was pinned in place to protect the sheet while the patient was recovering from the anesthetic is still there under the pillows, showing that the bed has not been thoroughly made in that time. At other times crumbs will be found, increasing the discomfort of a patient already worn with pain and restlessness.

Another matter that demands careful supervision is the trays. For that reason it is highly important that a head nurse should always be in her ward when regular meals are served, to note the appetite of the patients, to be sure that helpless patients or those confined to a recumbent position are either fed or have the food given to them, so that they can take it with the greatest ease

possible for them. On a visit to a typhoid-fever patient in a private room recently he was found with a good slice of broiled steak (which he was allowed to chew) cooling before him. He was absolutely confined to the recumbent position, and the thoughtless nurse had simply carried the piece of steak as it came from the kitchen, set it on the table, and walked out without cutting it or in any way attempting to fix it so he could eat it. There are a great many thoughtless pupil nurses in the training-schools of today, nurses who might be expected to display more real ability in managing such things than they do. It is not enough that they are taught how and when a thing should be done, but some one must be on hand to see that it is done.

How is the head nurse to do this, if physicians persist in coming at mealtime to make their rounds? In some of the leading hospitals in New York there is a standing rule posted in conspicuous places to the effect that no physician who comes to do dressings or make rounds at mealtimes (the regular hours) is entitled to the assistance of a nurse. It is a wise measure that should be observed in every hospital. Once the doctors understand that such a rule is there and will be enforced, they will adjust their hours to more convenient times.

The preparation of the diet-sheet is another duty that falls to the head nurse. Usually these are prepared at night, sent to the superintendent to be signed, and when the sheets from all the departments are collected, the quantities are aggregated and sent to the housekeeper. There are some few of the head nurse's duties that may safely be left to pupil nurses, but this is not one of them. Not long since a superintendent found that a head nurse

was actually requiring a probationer, as a routine practice, to make out the diet-sheets and order the supplies for the ward, while she attended to what she considered more important duties.

One of the most common errors to which head nurses are liable is the doing of the actual duties that ought to be performed by the pupils, thus allowing them to depend on her to supplement their efforts, instead of supervising and teaching. This is one of the chief reasons for failure with some head nurses. Instead of using their brains to plan and systematize the work and teach, they dabble in perhaps every duty the nurses have to do. If the nurse did not get around in time to dust the ward, they dusted it; they cleaned cupboards; made beds; wrote up records; did whatever they saw to be done, and, very soon, the nurses learned that certain things might be left every day and the head nurse would attend to them. In many cases it would certainly be easier to do the things than to take pains to instruct a novice in the art, or to plan a whole morning's work in detail and show a nurse how to go about her work systematically and get through, but that is not training nurses.

In the matter of bed-linen a good deal of care needs to be exercised. There has been, of late years, an outcry from private homes about the extravagance of nurses regarding linen, a fault for which our hospitals are mainly responsible. There is a happy medium to be aimed at in this matter. Too great economy is never commendable, neither is extravagance. The laundry work in a hospital is always a heavy item. An investigation recently as to the reason for the constant cry of shortage of linen in a certain hospital showed that some nurses changed beds

every time they gave a patient a bath, whether the linen was soiled or not. Clean folded sheets were used as pads under bedpans, and for various other irregular purposes, while the same kind of extravagance was discovered in the matter of towels. All the time the head nurse was there, seeing about treatments, personally directing the nurses in some matters, and entirely ignoring the question of linen, as though it was something for which she had no responsibility.

In the matter of household work and cleaning a head nurse will save herself much needless anxiety by making out a schedule covering the entire department of which she has charge, and stating definitely the work to be done each day and the hour at which it is expected to be completed. Only thus can she hope to keep her section in good condition. If ward maids or nurses find that it makes no difference whether they sweep or dust before noon or after, embarrassments will constantly occur. When this schedule has not been made out, it has happened that the ward has been undergoing a sweeping while the patients' dinners were being served—an actual fact, in this age of supposed sanitary intelligence! It is well also to remember that once duties have been assigned to Jane, they are not to be performed by Maria or Peter, even if Maria and Peter are good-natured enough to offer to do them. Ten chances to one Maria and Peter are themselves neglecting something on their own schedule while they are posing as kind-hearted individuals where they do not belong. When a heavy day comes, the effect of good or bad management in this respect will be most in evidence. There are occasions when perhaps she can afford to excuse indifferent work, but no probationer or

pupil nurse should get the impression that a head nurse is "easygoing" and that slackness will be tolerated.

The necessity of having a place for everything, and insisting that it be kept there when not in use, is another matter that requires frequent emphasis. Valuable time is wasted, tempers are ruffled, harsh words are spoken, often, because this rule is not adhered to in some hospitals. A night nurse, for instance, uses a hypodermic syringe or a roll of adhesive plaster, drops it somewhere, and forgets about it. The day nurse comes on, thinks she can go immediately and put her hand on it, and has to chase hither and thither searching for the missing article. Hypodermic needles are left without wires, and next time they are needed a new needle has to be sent for. When these things occur the fault lies very largely with the head nurses. They do not hold nurses strictly to account for these things or follow up till they find the delinquent.

The daily inspection of refrigerators, ward-lockers, table drawers, takes but a few minutes and goes a long way in keeping those out-of-sight corners in proper condition. In the matter of plumbing, too great care cannot be exercised to see that dressings or other insoluble matter are not allowed to obstruct the flow of water. Likewise the need of repairs should be promptly reported. When a screen is found broken, or a rocking-chair that needed but a screw to put it in order, a door that will not open or close properly, and a general run-down condition prevails, it is pretty plain evidence that the head nurse of that department is in the wrong place.

A point that sadly needs calling attention to is in regard to the use of screens in wards. It would seem, from

observation, that this laxity is more likely to be found in the large hospitals with large wards than in the smaller hospitals. Frequently the authorities of the hospital are to blame, in that they have not supplied easily movable screens, or enough of any kind, but it may safely be inferred that, if there was an urgent demand for more screens, they would be provided. Many nurses are apt to be careless of this matter, and some will think nothing of giving a bath or exposing a patient for catheterization or a perineal dressing in a ward without a screen. Even in walking down the corridors of some hospitals a visitor will see ample evidence that laxity of this kind is far too common. It is bad for the nurse herself to allow her to be so careless, and it is certainly not conducive to the comfort of the average patient to be thus exposed.

The abuse of hospital supplies and appliances is one of the very frequent complaints heard. Wilful extravagance is not unusual. So many nurses feel that because the property belongs to a corporation it can make little difference to any one whether they are careless or not. A saving of five cents a day for each patient—five cents only—on the total supplies of food, drugs, surgical supplies, appliances, linen, etc., would go far toward saving a hospital from having each year to report a deficit. This is another point on which much depends on the head nurse. Eternal vigilance, with careful accounting for supplies, is the only way by which those addicted to such carelessness can be made to feel their responsibility for the proper use of the supplies provided.

Every now and then announcement is made of the poisoning of a patient in a hospital by a wrong dose of medicine. No head nurse who appreciates her responsi-

bility will ever allow herself to be guilty of carelessness where drugs are concerned. Neither will she tolerate carelessness in the nurses whom she directs. There are a few lessons that need to be repeated seventy times seven or oftener in a nurse's course. One of these lessons is regarding the precautions to be used in the handling of drugs. Teach them first that there is an element of danger in every drug; teach them never to give or use a drug of any kind that is not labeled; never to give a drug in the dark; never to omit reading the label carefully and measuring the dose accurately; never to use a pill or capsule that has escaped accidentally from its container; never to give a medicine they have a shadow of a doubt about; teach first, last, and all the time the necessity of being careful in reading the label; that it is not enough to glance at a bottle and see the word "opium," for instance, without taking time to notice whether it was the tincture or the camphorated preparation. Teach that they must not hastily jump at conclusions regarding doses—for example, must not rush off and give two one-thirtieth grain tablets of strychnin because one-sixtieth is ordered—sixtieth grain tablets are not at hand, and they happen to know that twice thirty is sixty. Teach these few principles thoroughly, drill the nurses on them frequently, keep the most strongly poisonous drugs separate from the others, write orders clearly and distinctly, and such accidents will be few and far between.

One other detail on which head nurses are apt to fail is in the arranging of "off-duty hours" for their nurses. On rare occasions, when the work is especially heavy, or in time of emergency, it may be necessary to deprive pupil nurses of rest time that is rightfully theirs, but these occasions should be exceptional. No head nurse should

feel it her privilege to retain nurses over the regular hours on duty for extra work, or to allow them to miss their time off, without reporting to the superintendent why it was necessary. The custom of requiring head nurses to report each Saturday night how much "off-duty time" each of their nurses had had during the week would help considerably in securing for pupil nurses the time for study and recreation that justice to them demands. In many cases where nurses are habitually on overtime it may be traced to lack of system or bad management, rather than the unusual pressure of work. If a head nurse cannot manage the work so as to give, unless in exceptional conditions, her nurses the time off duty they are supposed to have, the matter is one to be reported to the superintendent, and possibly to the board, for consideration.

A point which has caused embarrassment in many hospitals has been the neglect on the part of the head nurse to notify the superintendent when she herself was leaving the hospital for a few hours or an afternoon off duty. This, common courtesy and justice to the work demand. No head nurse who is really fitted to direct others will be guilty of this failing, which is more than a breach of courtesy—it is a breach of trust. She requires her nurses to report to her at such times, and should be just as careful to observe the point herself.

These are but a few of the responsibilities that devolve on the head nurse. While a certain amount of individual choice is permissible in the management of the daily routine, she should remember her relation to the whole institution, and establish no precedents that would create embarrassment if allowed in all departments; she should be extremely careful to observe general regulations that are made for head nurses or for the institution as a whole.

HOSPITAL DIETARY

GENERAL DIET.

BREAKFAST.

Tea or coffee
Milk and sugar
Corn-bread
Bread, rolls
Toast

Breakfast Foods.

Oatmeal
Wheaten grits
Hominy
Indian meal
Farina

Meats.

Hash
Chipped beef
Salt fish
Eggs, bacon
Stewed fruits

DINNER.

Soup: beef, mutton, bean
Crackers or bread
Beef, mutton
Corned beef, ham, fresh fish
Stewed vegetables
Potatoes, beans
Tomatoes
Turnips, peas, corn
Spinach, lettuce, squash
Carrots, beets
Succotash

Desserts.

Fresh fruits
Pudding: rice, tapioca, sago,
custard, junket, corn-
starch, bread
Gelatin
Ice-cream

SUPPER.

Potatoes: baked, purée,
scalloped
Tomatoes, macaroni, rice
Corn, beans
Fruit in season, fresh or
stewed
Bread, butter, and tea

LIGHT DIET.

BREAKFAST.

Tea or coffee
Milk and sugar
Bread, toast, rolls
Breakfast foods as in gen-
eral diet

Meats.

Eggs, chipped beef
Fish

DINNER.

Soup: meat or vegetables
Meats: beefsteak, roast
chicken
Whitefish
Vegetables: Potatoes, cel-
ery, lettuce
Macaroni
Purées

Desserts.

Puddings: rice, sago, tapio-
ca, corn-starch
Gelatin
Fruit salads

SUPPER.

Bread, milk-toast
Cereal foods
Light salads
Fruits

SEMISOLID DIET.

Milk, tea, coffee, cocoa
Custard, sago, rice
Gruels, cereals, jellies
Tapioca, crackers, broth
Eggs, soft boiled or raw or
in combination with milk
Ice-cream, sherbet
Gelatin
Malted milk
Prepared foods
Milk-toast
Corn-starch
Broths: strained vegetable
or animal

NITROGENOUS DIET.**BREAKFAST.**

Tea, coffee, or milk
 Bread and butter
 Graham bread
 Eggs, fish, cold meat
 Zwieback
 Shredded wheat biscuits

DINNER.

Soup: animal broth, clear
 Beef, mutton, fish
 Vegetables: spinach, lettuce,
 celery, string-beans
 Desserts: Gelatin and jel-
 lies

SUPPER.

Graham bread
 Milk, tea
 Eggs
 Meat as above
 Cottage cheese

FLUID DIET.

Milk, buttermilk, tea
 Coffee, cocoa, malted milk
 Albumin-water, sherbet
 Ice-cream
 Barley or oatmeal water
 Gelatin, jellies, or junkets
 Animal broths, strained;
 vegetable broths, strained

MILK DIET.

Six pints daily

FARINACEOUS DIET.**BREAKFAST.**

Tea, coffee, milk, sugar
 Bread, toast, rolls
 Cereal foods

DINNER.

Soups: Potato, tomato,
 barley,
 Bread, crackers
 Vegetables: potatoes, toma-
 toes, macaroni, succo-
 tash, corn

SUPPER.

Tea, milk
 Cereal foods
 Toast, rolls
 Fruit, apples, prunes, pears

Extras only on special
 order of attending Phy-
 sician

Milk, eggs, beef-tea, oysters,
 steak, chicken, chicken
 broth

Ice-cream, jellies, custards

DAILY DIET LIST

FLOOR

WARD _____ PRIVATE

CLASS OF DIET	No. of Patients	REMARKS
General Diet.		
Light Diet.		
Semisolid.		
Fluid.		
Nitrogenous.		
Farinaceous.		
Milk.		
Special or selected.		

EXTRAS—

Head Nurse.

APPROVED _____

Supt.

DATE _____

CHAPTER XXII

Orders and Reports

To have the orders written so clearly and plainly that they are easily understood is the first step toward having them carried out. This is another of the important duties of the head nurse. The orders actually given by the physician constitute but a small part of the treatment actually required. In most hospitals there are "standing orders"—general instructions to be observed in regard to all patients unless exceptions are definitely made for good reason. Years of experience with nurses—good, bad, and indifferent—have taught at least one superintendent that if good nursing is expected, the standing orders cannot be too full, too definite or explicit, or posted too conspicuously. One would naturally expect any nurse to know enough, for instance, to comb a female patient's hair every day without being told. It is only after repeated disappointments because of taking things for granted that superintendents have learned to include such commonplace duties in the standing orders. It is not a good plan to depend on standing orders being written in the front pages of the order book. There is always the danger that they will not be carried over to the new book, and some part of the house will be without standing orders. Neither is it well simply to post a copy on the wall, to be removed by the "Pagan housecleaners," and possibly be carried out with other papers. Have the

standing orders printed or typewritten, framed under glass, and posted in the bath-room, diet-kitchen, over the writing-table, or in some other place where the nurses cannot fail to see them frequently.

When one sees the lack of system of writing orders that prevails in some hospitals the wonder is that any orders are carried out promptly and properly. Such carelessness, if it were to take place on a railway system, would cause the public to raise its hands in horror and appeal to the government to interfere. It may seem like laying a great burden on head nurses to say that the daily orders for each patient should be written each day, but it is the only safe rule to follow regarding hospital orders where acute cases are being handled. If the ward is devoted to chronic cases, or ambulant cases, or convalescents, perhaps such rulings might be relaxed; and yet, we all admit that the period of convalescence is fraught with many dangers; but, with the active service that is now the rule in general hospitals where life and death are always in the balance, too great care and supervision over orders cannot be exercised. The method used varies greatly. In some hospitals an order-sheet is attached to each chart. In others the orders are collected from the separate order-sheets and are arranged with the standing orders for each patient that are to be specially observed that day, and transcribed in a book. In others a separate medicine list is kept.

After a trial of several different methods the system of having a record-sheet kept for every patient from the time he enters the hospital, with a space at the bottom of each sheet for the physician's orders, has been found by far the most satisfactory. Separate order-sheets for the

physicians are very likely to become detached and to accumulate and make the chart cumbersome to handle. The pupil nurse is responsible for executing the orders written in the order-book by the head nurse. The head nurse is responsible for taking down the physician's orders if he will not write them himself on the space for that purpose at the bottom of each sheet, and for transcribing them in the general order-book. While this latter method may take more time, it is the surest and best method, especially in dealing with probationers or inexperienced nurses. Instead of having to handle half a dozen or a dozen chart files to see what her duties are, the pupil nurse finds her orders grouped together in one book and can check off each order as it has been attended to. Thus John Smith may need to have his temperature taken every two or three hours, while John Jones, in the next bed, requires it only morning and evening. John Smith may have to be bathed every day or every few hours, John Jones but twice a week. When the standing orders say that each patient must have a bath twice a week, it might be expected that John Jones would get his bath without further orders, but it has been found that Saturday has come without John Jones having had his first bath for the week, when his second one should have been due. Therefore it behooves the head nurse who wants good, prompt nursing to state in the orders for the day that John Jones must get his bath this day. A specimen order might read as follows:

JOHN JONES: T. P. R. q. 3h.: 8-11-2-5.

Bath this A. M. Fluid diet: milk, 3 ounces, with lime-water, 1 ounce, alternating with chicken-broth, 3 ounces q. 2h.: 6-8-10-12-2-4.

S. S. enema A. M.; Strych., gr. $\frac{1}{16}$, hypo., 12 and 6. Measure urine. Prepare for clinic at 2 P. M.

With orders written thus for each patient there is no excuse for omissions, no excuse for a nurse who says she did not know she was to do this or that today. It is never a good plan to write the orders for some patients, and say regarding others, for instance, "see page 4 for Black's orders." Let the orders for each patient be grouped together for the day and then hold the nurses accountable.

In addition to writing orders distinctly and definitely, it is well for the head nurse to call attention to any change in dosage. This ought not to be necessary. If every nurse reads her orders carefully, it would not be necessary. But there will always be nurses who need special admonition along this line. For instance, the dose of strychnin might be ordered decreased or increased. If the nurse's attention is not called to the change, she may glance at the word strychnin, overlook the dose, and continue the first order. These things do happen, and the thing to do is to make it as difficult as possible for a nurse to make a mistake, and as easy as possible for her to do the thing required of her. If we want exactness in nursing, we must use every possible means to secure it.

In the matter of records there is still much to be desired in a great many hospitals. If the bedside records kept by some nurses were to be shown as evidence of the thorough work done by the hospital, they would make a forlorn, discreditable exhibition. Thoroughness in this respect only comes as a result of careful training and supervision. To know how to state clearly, concisely, and colorlessly the exact facts about a patient is no insignificant accomplishment. It means that careful teaching in how to observe and record symptoms and facts has

been given and practised, and the teaching can begin with the first day of probation. In this as in other matters it is never a good rule to take anything for granted. A probationer who has been shown how to give a laxative enema has doubtless been led to believe that a good result was obtained with a free evacuation of the bowels. She was told, perhaps, to note on her records "good result." Such a girl might be excused if, after giving a pint of salt solution which was intended to be retained and absorbed, she recorded a "good result" when the patient immediately expelled it. She might be excused, but her instructor should not be excused for not having given clearer teaching regarding it. Thus these practical points might be mentioned by the dozen.

There are certain facts that should be made a matter of record on every sheet. First, the patient's name, thus: "Mrs. Mary Smith," not her husband's name, Mrs. Peter Smith. The physician's name, the date, and the name of the nurse should be filled in the blank space provided, not only on the first sheet, but on every sheet. The amount of sleep should be estimated in hours. Such statements as "slept pretty well" or "had a good night" are too vague and general to be worth anything. If a patient is on fluid diet, the exact amount and the food that has been taken should be noted. In other cases the class of diet, as semisolid, light, or general diet, will usually be sufficient, unless in case of gastric or intestinal disturbance, when it will be best to state the articles of food given.

One thing that usually requires great emphasis, careful watching, and strict dealing is the time when records are made. Nurses who are otherwise conscientious will often allow hours or half-days to go by without making

a single entry. Then they will guess at hours, trust their memories for temperatures, pulses, and respirations of half a dozen patients, put down a haphazard estimate of doses given, and the time, and call that sheet "a clinical record." As a statement of facts, it is not worth the paper on which it is written. Records that look neat, on which the penmanship is beautiful, the statements made in correct style, are often, in fact, nothing more than records of a nurse's unreliability. A case comes to mind of a graduate nurse on a special case in a hospital. The case was intussusception, about seven inches of the bowel having been removed. The little fellow was crying piteously from hunger one afternoon when the superintendent went in. The nurse had gone out for a walk. Thinking it might be time to give him some nourishment, the superintendent picked up the record to see when the last had been given. It was then about 5 P. M. Not an entry had been made since the physician had made his morning visit at 9.30. The superintendent took the pains to notice the record the next morning, and everything was set out in beautiful shape. Every hour, even while the nurse had been away, she had given him some treatment, according to her record. This is the kind of thing that superintendents and head nurses have to watch for and fight continuously—not with all nurses, but with a few nurses.

There is only one thing worse than neglecting to make records at the proper time when the duty is performed, and that is, recording before the thing occurs. This is done, unfortunately, by some nurses, probably in every hospital. Nurses who have given a good report of themselves in other ways have fallen under that subtle form of

temptation. They have been found recording as having given, for instance, 8 o'clock treatments at half-past six. On inquiry as to how it came that a record was made of nourishment given to a patient at 8 o'clock when it was still only half-past six, the nurse said she "happened to have a little spare time and she thought she would just fix up her records." She said that, of course, she would do everything she had written down. Her intentions may have been good, though her methods were bad, but can any hospital afford to bother providing paper and pens and ink to record what a nurse intends to do? Why volumes might be written every week about nurses' intentions, but what would they amount to? What the hospital wants, and the physician wants, are *facts* regarding duties actually done, things or conditions actually observed. Nothing else has any value for them as records, and yet this thing will continue to be done by some few nurses in every hospital unless a strict supervision over all nurses and all records is the rule, and unless there is a severe penalty attached to such an offense. To the self-respecting citizen the laws against stealing are no burden. To the self-respecting nurse the laws against such practices will be no burden and they do help to deter weaker characters from giving way to such temptation; they do help in maintaining high standards. All good laws have an educational effect. There is only one word needed to characterize such actions, the little word, *l-i-e*, unqualified. If a record says anything to a physician, it says of a certain thing duly entered at a certain hour, "I have given that treatment," when the facts were the nurse had recorded her own intentions as facts. The value of any record depends, after all, pretty largely on the

conscience of the nurse who makes it. For this reason a poor penman and a poor speller, with good natural ability and a good healthy active conscience, is worth infinitely more in the sick-room than the cleverest college graduate who keeps her conscience wrapped up or never uses it except when some one else is around.

A weak point in many records is in the neglect to note important facts. This seems an absurd statement, but it is true. There have been stored away in the archives of some hospitals records of midwifery cases in which the birth of the child was never mentioned. The circumstantial evidence was pretty strong that there had been a baby connected with the case. Here and there on the record it was stated that the "baby nursed," or had its temperature taken, or, perhaps, had a bath, but when that baby arrived on the scene of action, whether it was normal or defective in any way, whether it was a male or female, whether it was white or black, whether it weighed two pounds or ten, its nurse entirely neglected to record. The same kind of thing is true of many operative cases. Nothing is on the records to show that there really was an operation.

In recording the course of surgical cases or midwifery cases it is a good plan to note the days as they pass, counting from the principal event thus—Monday, January 24th—fifth day. It is quickly done, and it saves a doctor's time in counting back, as he usually does, in considering the removal of stitches, dressings, sitting up, etc. The date and the hour of an operation should always be noted on the nurse's records. The operating-room records should contain the report of the operation, what was done, what anesthetic, sutures, and ligatures were used,

together with a general statement of the findings at the time, but that does not excuse a nurse from stating on her report of the case at least the time the patient went to the operating-room and returned.

Another point that should always be noted is that a wound was dressed. It is much more important many times to note that fact, for instance, than that a temperature in which there was no change from day to day had been taken. Yet the one is done and the other left undone, as routine practice in some hospitals. There is urgent need that some hospitals wake up and take more notice of records and get away from the bondage of habits. A little study of the question, and a little more careful instruction to nurses as to important and non-essential points, would surely be worth while.

Another point that helps in various ways is to require nurses to state on the records when a drug is discontinued. The length of a chill, the character of the breathing, if at all unusual, the appearance of any abnormal discharge from a cavity or eruption on any part, are points that require a little special emphasis with many nurses. For instance, in the case of a colored boy brought into the hospital with frozen feet, the doctor watched the toes carefully, instructing the nurses to observe closely certain symptoms. His medicine was regularly given, the general care was good, but of five nurses and an interne, besides the physician in charge, who had been on duty with that colored boy, not one of them reported a suspicious-looking eruption that was on his hands, face, and other parts of the body, until a bright, wide-awake young man nurse was put on the ward, and the first day reported these suspicious findings to the superintendent. It was

one of the worst venereal cases that had ever been admitted to the ward, and yet no precautions had been taken to prevent infection till nearly a week had passed. Nurses are prone to fall into ruts, to get into the habit of mechanically recording what they themselves do, while they often neglect to note important facts which they see or ought to see.

It is well also that the head nurse should not fail to correct a tendency, sometimes manifested, unintentionally, to attempt a diagnosis and record it. For example, a nurse will thoughtlessly state that a patient is suffering from neuralgia or is hysteric, when, as a matter of fact, the ablest physician will sometimes find difficulty in deciding whether he has to deal with hysteria or neuralgia.

The ability to decide between significant and unimportant symptoms comes only with careful instruction, experience, and practice, extended over a long time, but it is safer to teach nurses to lean to the habit of keeping full records, rather than that, for the sake of brevity, they should neglect to note facts that have an important bearing on the case.

CHAPTER XXIII

The Night Supervisor

The chief night nurse occupies a position of peculiar responsibility. She sees very little of the physicians, rarely receives orders from them, yet is held responsible for the execution of those orders. It is hers to discern the importance or significance of certain symptoms, her business to decide as to the wisdom of calling up the interne, or, it may be, the physician in charge of the case, or, in some circumstances, to summon the patient's friends in the event of serious change. It falls to her lot to meet emergencies of all kinds, to usher in the accident case or the maternity patient, and make hasty preparations, to meet, resourcefully and promptly, the thousand and one situations that arise at night in a hospital devoted to the care of patients suffering from acute diseases and accidents. She, as a rule, writes no orders for her night staff, yet must see that the orders written are properly and punctually carried out.

Her work is, to a large extent, dependent on the day head nurses. They can do much to remove difficulties for her or to create them. While it is readily admitted that for the good of all concerned the most cordial relations should exist between the day and night supervisors, as a matter of fact, the attitude assumed by both is very often unnecessarily critical and harsh. A little wholesome criticism is good for both parties. If the day nurses

went off duty leaving utensils not cleaned up, the head nurse in charge of the delinquents ought to thank the night supervisor for calling attention to the neglect. It is the only way to maintain standards of cleanliness and order. But, is she thankful? Sometimes, perhaps, but often she resents it, and the same is true on the other side.

While in regard to rank the day and night supervisors are equal, yet in the matter of housekeeping and general ward management more responsibility rests on the head nurse in charge during the day. She, as a rule, ushers in the new patients and receives orders and explanations. It is not only a kindness, but a duty, to give to the night supervisor as full a report as possible, especially concerning those patients who are most seriously ill. What instructions have been left in case alarming symptoms develop? Is a certain patient who has been a special cause of anxiety better or worse? Has any special change occurred since the doctor saw him in the morning? Has the doctor left any special instructions about calling him? These are questions where individual judgment comes largely into play—questions in which the utmost harmony between the day and night staff is necessary. There are some head nurses who seem to go about with a chip on their shoulder, ready to argue over the slightest matter, and especially to pick a quarrel with the head nurse who alternates with them. Such nurses are out of place anywhere in an institution, and particularly as head of a department.

The night supervisor should be slow to criticize the day head nurse regarding management, and should upset her arrangements as little as possible. When she finds

it necessary to do so, common courtesy would suggest that she use the first opportunity of making explanations.

The comparative freedom from interruption from outside sources makes it possible for a night supervisor to do much to help her staff in systematizing their duties so as to economize time. There are good nurses who are habitually slow; faithful nurses who are always behind; nurses who run from one thing to another, leaving the first unfinished, and soon find themselves hopelessly in a muddle. When the clock strikes for the day nurses to relieve them, there are still numerous duties unfinished. In such cases the night supervisor has a splendid opportunity to show the nurses how to get through, to plan a routine of their duties, and, by keeping them to it as far as possible, by making them finish up as they go along, lead them into better habits.

There is one difficulty in planning the night work of a hospital which needs constantly to be guarded against, and in some cases legislated against. This arises from the bad habit some doctors have of making evening visits and leaving a list of new orders for the night nurses, which necessitates an additional burden of work that should have been attended to by the day staff. Very frequently one night nurse must take charge of patients that are divided among three or four nurses during the day. If the work is properly planned,—dressings, baths, and daily treatments attended to during the day,—this can, as a rule, be managed without serious difficulty. But if an interne or a visiting physician is allowed to come in at 9 P.M. and order enemata for two or three patients that should have been ordered in the morning; if another doctor can come in and order a bladder irrigation for his

patient; another, massage for his—the best system in the world will fail. The most capable nurses will find it absolutely impossible to give general attention to all the patients, answer bells promptly, and at the same time carry out these special orders for the few. There are some physicians so thoughtless, so absolutely devoid of system in their own work, and so utterly indifferent to the rights of hospital workers that they need very strict dealing with on the part of the superintendent if confusion of orders and burdens grievous to be borne are not common experiences of the night staff.

To the slow nurse who is always behind there usually seems to be but one remedy—to begin the regular morning work earlier. It is not uncommon to find night nurses waking up the patients at 2 o'clock to have their morning toilets attended to and their temperatures taken. It is true, the night staff is often overburdened, especially in the evening and early morning hours, but careful systematizing of the work will help wonderfully in getting through, and in times of extra pressure extra nurses should be provided for the busy morning hours. It should be no unimportant part of the night supervisor's duties to plan the routine of work, and also to see that the patients are not aroused from their slumbers at such unseasonable hours as they often are, when the matter is left entirely to the pupil nurse's judgment.

In the matter of punctuality, the night supervisor can teach by example as well as by precept. Especially is this needed in regard to coming to meals. If the hospital rules require night nurses to be in the dining-room at a given time, it is the supervisor's duty to see that they are there. If the rules say that night nurses must be in bed

at a certain hour, and must remain there a given time, she has no right to ignore irregularities and allow nurses to violate rules without reporting them.

In forming habits of study, the night supervisor can do much by encouraging her night staff to set apart some regular time each day to real systematic study. It is a common complaint of nurses that they cannot study because they are on night duty. That notion needs to be combated, for it is true that nurses who are really ambitious to study have found their term of night duty no drawback, but rather favorable. Much time is wasted by probationers and nurses in aimless gossiping. Clad in kimonos, they congregate in each other's rooms and spend hours rehearsing the day's events, in discussing their patients or the doctors, what they get to eat or what they think they should get, what Mrs. Fisher said or Miss Green did, while at the same time they groan and continue to groan and complain that they have no time for study. Not only are they wasting time and energy in giggling and unprofitable conversation, but they are forming habits of gossiping about people that will be a detriment to them through life. The nurse's life in a hospital is circumscribed and narrow and depressing, which is all the more reason why head nurses should not only put forth extra efforts to discourage personal gossip, but to awaken a desire for higher things.

It may seem needless to state that the same strict rules of discipline should prevail on night duty as on day duty; but it is a fact that disciplinary regulations in some hospitals are greatly relaxed at night. Sometimes a degree of freedom, where internes are concerned, is permitted that, on day duty, would not be tolerated. Sometimes

nurses are allowed to visit in patients' rooms promiscuously, and to visit each other in wards at night when the rules emphatically forbid. These are points on which the blame rests more on the head nurse than on any other person. It is not only her business to obey the rules of the institution which pertain to her, but to see that the nurses of whom she is in charge do not violate those that pertain especially to them.

That little motto, mentioned before, "study to be quiet," is one which the night supervisor needs to keep constantly before her staff. Many a nurse with good judgment in other things, good ability, good conscience, and good health, has made a poor record as a night nurse because she was noisy. Doors banged, bed-pans rattled, her feet came down with a thud, she talked in a loud tone, everything she touched seemed to make a noise, and every one in her department was unnecessarily disturbed. The most highly strung patient's nerves were continually on a tension—all because the nurse had not learned to be quiet. The art of doing one's work quietly comes easier to some than to others, but it can be, and should be, studied by all. No one is in better position to teach this art than is the head nurse.

The night supervisor will often be sought as a confidential adviser by some pupil nurse who feels she has a grievance against her day head nurse. She sees what she thinks is favoritism shown, or she has been reprimanded, or misunderstood, or in some way an injustice has been done her. Perhaps, while smarting under a rebuke, she pours out her troubles to the night supervisor. It is a delicate situation, one requiring infinite tact, and often she scarce knows what to answer. There is one thing

that should always be kept in view in dealing with such situations. If real harmony is to prevail in the institution, a sense of loyalty to each other must be shown by head nurses. No one should be led into doing or saying a thing that might weaken another head nurse's authority, or detract from the respect due the position. Regardless of personal feelings in the matter, even though one side of the story seems to point toward injustice, a discreet silence or a non-committal attitude is the best course for all concerned. At the same time, a sympathetic hearing and wholesome counsel can always be given to the nurse whose feelings have been wounded.

The nurse who craves popularity, who prizes it above the consciousness of duty faithfully performed, should never be given head-nursing responsibilities. No one whose business it is to correct and supervise, to enforce rules and point out faults, can expect to be popular in the ordinary acceptance of the term. Human nature is so constituted that it does not keenly relish having failures and defects in work and character or conduct brought under condemnation, even though it is conscious of them. Having favorites among nurses, the establishing of a gossipy attitude, confidential personal relations with subordinates, are serious faults in a head nurse. The head nurse who aims to be popular with her probationers and staff nurses is reasonably certain to fail in her duty to the patients and to the institution.

Frequent conferences with the superintendent will do much to keep the night head nurse in touch with institutional affairs in general. A preliminary talk on the part of the superintendent to each new force of night nurses will help toward securing good work and the maintenance

of proper discipline. Of necessity, the life on night duty is somewhat isolated. The nurses come in contact with comparatively few people except the sick, and a depression, partly physical, partly mental, seems inevitable because of the turning of day into sleeping-time and night into working time. Naturally, the head nurse shares to a degree this depression, but the experience is one that affords splendid opportunity of developing resourcefulness and many other qualities that can never be called into play without the responsibility for their use that is necessitated by night duty.

CHAPTER XXIV

The Chief Surgical Nurse

The chief surgical nurse occupies a position of responsibility second only to the superintendent. On her keenness, her organizing ability, her conscientiousness in details will depend, to a great extent, not only the reputation of the hospital, not only good results in surgery, but the lives of many of its patients. In addition to the qualifications needed for successful head nursing in general, she needs to be thoroughly abreast of the times in regard to her own branch of nursing.

In undertaking her work, a comprehensive system of procedure, thoroughly understood by pupil nurses, will greatly facilitate the daily routine and save much time. "To every man his work" is a good rule, care being taken that each detail of an operation has been anticipated and definitely assigned. In most hospitals with an active surgical service the operating corps consists of the chief nurse and two pupils. The following method of organization has been found thoroughly satisfactory. The head nurse has charge of the operating-rooms, anesthetic room, aseptic preparation room, emergency room, sterilizers, etc. She is responsible for the conditions of the instruments, must keep them catalogued, counted, and be ready to account for them at any time; all surgical material used throughout the hospital is prepared under her direction; she superintends and assists in the prepara-

tion for the operation, and acts as second assistant; she is held responsible for the proper labeling of pathologic specimens and must see that they reach the pathologic department in good order.

The senior pupil nurse has for her special duties the preparation of all unsterilized materials; she does the work of the "clean nurse" at operations; she is held responsible for counting the sponges and also replenishing the supplies throughout the house. In preparing for operations she is held responsible for the presence and condition of the operating clothing, the gowns, face-masks, and aprons of the surgeon and all his assistants, also for the brushes and rubber gloves.

The junior pupil nurse does all the duties that fall to the lot of the unsterilized or general nurse. During operations she supplies visitors with gowns, lifts the patient to and from the table, assists the assistant surgeon in preparing the field of operation, empties basins and renews solutions, keeps the floor clear and clean, picks up fallen instruments, is responsible for the operating blankets and arm or leg supporters, changes the patient's gown after operation, and assists the anesthetist as may be necessary. She is responsible for the dusting of the operating-room, for cleaning rubber goods, for the tables, pillows, and their coverings. Prior to operations she assists in preparing dressings and the arranging of the anesthetist's table is included in her duties. After operations she removes the blood-stains from clothing and collects it for the laundry.

In the operating-room, expensive supplies are constantly in use and the tendency each year seems to be toward increase rather than decrease in the cost of the surgical

department. Experience has shown that it is in the power of a head nurse to influence very decidedly the cost along certain lines. For instance, a change of operating-room nurses in one hospital resulted in a decrease of almost one-half in the quantity of ligature material used, while the results were equally satisfactory and the physicians better satisfied. The one nurse had been trained to economize, the other had not.

In the matter of absorbent gauze, great waste is possible, and in many hospitals waste is the rule. A system of washing and resterilizing gauze that has been used in the operating-room has been introduced into some hospitals, with the result of a saving that amounts to thousands of dollars in the course of a year. The method employed in the Massachusetts General Hospital, Boston, has been described by Dr. F. A. Washburn, the assistant superintendent, as follows: "All gauze and bandages from ward dressings, amphitheater, out-patient department, and operating-rooms are collected in paper bags and taken to the laundry. It is transferred from these paper bags to open-work bags made of cord, these bags being only half filled. The gauze is kept in these bags throughout the rest of the process of washing and the laundry sterilization. It is put in soak overnight in cold water, which is changed several times. The following morning it is put into an iron washer capable of resisting steam pressure up to ten pounds. It is first washed in cold water until the water runs perfectly clear. The gauze is then washed with warm water, soap, and sal soda. After the washing it is rinsed in hot water. After the rinsing, enough hot water is turned into the washer to cover the bags of gauze as they lie on the bottom of the washer. Steam is then turned

on to a pressure of ten pounds. A self-registering thermometer placed in the gauze twice showed a temperature of 239° and 240°. This temperature is maintained for one-half hour. During all this process the washer is moving with a to-and-fro motion which continually agitates the gauze and presents all parts of it to the motion of the water and steam. The gauze is then put into the extractor, and when dry is overhauled and straightened and instructions given to throw out any piece which is stained or has anything adherent to it. The final sterilization is then done at a temperature of 250° F., with a pressure of fifteen pounds in the sterilizing room. So much for the gauze which is recovered and utilized as gauze. There is a part which is in too small pieces, or is too badly tangled to be worth straightening. This material is run through a rag-picker and becomes a very light and absorbent lint, which is sterilized and used in dressings where absorbent cotton or oakum is ordinarily used. It is also used in the boiler house in the place of waste for wiping around the engines. Another part of the gauze is thrown out because it is stained with chemicals. These pieces are utilized by the house-cleaning force. This process, therefore, means not only less gauze bought, but less absorbent cotton, less oakum, less waste for the engine-room."

The demand of present-day surgeons for rubber gloves has added a very costly item to operating-room equipment. That a very considerable saving is possible along this line has been revealed by statistics from different hospitals. The amounts used vary considerably. In one hospital 300 pairs were used for 162 operations; in another, twelve pairs for 252. One hospital reported that a considerable saving was effected by boiling for only

two minutes. In other hospitals boiling is not practised at all, the gloves being powdered and steam-sterilized in packages. Care in putting on and removing is the important thing in prolonging the life of a glove. Patching the old gloves with adhesive dam and cement prolongs their usefulness and decreases expense. These should be repaired after each day's operations.

By careful handling of the instruments and accounting for them by frequent inventories a head nurse can effect a very decided saving in the course of a year. Alcohol is another article which is apt to be lavishly used and wasted. Some head nurses watch this point very carefully, saving all the alcohol left after pouring over hands or instruments for disinfection, and sending it to the wards to be diluted for external rubbing.

In the cutting of dressings and preparing them for ward use there is abundant opportunity for the practice of intelligent economy. A difference of an inch in the size of a sponge makes a difference of many dollars a month in the aggregate, when much dressing material is in use.

The ordinary cotton waste used for cleaning machinery, and that can be purchased for less than half the price of absorbent cotton, can be made thoroughly absorbent by boiling in a soda solution and makes an excellent filling for vulva pads.

The management of the linen for the operating-room presents a serious question—one on which a great deal depends on the personal habits of the surgeons. In one hospital it was found necessary to limit the number of sterilized gowns that could be provided for one operation to five. The results were fully as good as when gowns were demanded for every visiting physician or student who

happened to be admitted to the operating-room. Previous to this ruling, gowns were often demanded by the surgeons as an act of courtesy to their visitors, rather than because they were needed for the sake of asepsis.

In the matter of sheets and towels, the nurse must also, to a great extent, be guided by the surgeons, but not entirely. If she is alert and careful, she can, by a glance, restrain pupil nurses who are thoughtlessly and needlessly opening fresh packages, or check the sending back to the laundry linen that is not soiled and might be resterilized.

These are only a few of the points that need to be guarded. A head nurse's ability, or the ability of any hospital employee, is not measured simply by her technical knowledge. She must be able to manage her department efficiently and at the same time economically. A head nurse who can reduce the expenditure in an operating-room ten dollars a month as compared with her predecessor, is worth ten dollars more a month, and her value will undoubtedly be recognized in time.

The cost of the supplies she constantly handles is a point on which the head nurse should familiarize herself by a study of surgical supply catalogues. No nurse who has the good of the institution at heart, or who has real pride in her management, will long be content, even though wilful extravagance is the rule when she assumes charge, to allow that state of things to continue. An ambition to reduce the amount of supplies, month by month, until the minimum amount possible with good work is reached has resulted in an enormous saving to some hospitals. A nurse graduate who had charge of a small hospital remarked to her superintendent when she returned

to visit the hospital in which she had been trained: "I could run the operating-room in my little hospital with the waste from the operating-room here." What has been done in one hospital can be done in others toward reducing the cost of the surgical department. Here, as everywhere, the first step in good management is keeping account of the items every day.

Much is said and written as to technic. But chief operating-room nurses, as a rule, fail less frequently in matters of technic than along other lines in their management of an operating-room, though they do fail in technic sometimes. One nurse who appeared to be "diligent in business," proved a failure from lack of methodic planning for an operation. She depended too much on her assistants running hither and thither to hand things while an operation was in progress. When a catgut ligature was called for, it was on a table in a remote corner and she had to wait for an assistant to get it. If she needed a strip of iodoform gauze, it was in a jar somewhere else. Her hands being sterile, she must have an assistant to help her to get it. The assistant was meanwhile busy emptying basins, getting hot water, etc., and the result was a constant delay and confusion irritating to the surgeon and to all concerned. She lacked in readiness, and her service was unsatisfactory.

Another common failure is that the chief surgical nurse becomes too intimate with the nurses in training in her department. Their relations become so familiar that discipline is out of the question. Laxity in work is pretty sure to result when this occurs. A chief nurse who allows the orderly to loiter around and visit with her nurses while they are preparing dressings; who allows the medical

students to become so well acquainted with them that a freedom bordering on familiarity results, or who herself establishes familiar relations with them, thereby demonstrates her unfitness for the position. Womanly dignity is a primary requirement for such work unless the whole tone of the operating-room is to be undignified, inferior, and cheap, free, and easy.

The inability to observe all the needs of an operating-room while an operation is in progress, or to plan for succeeding operations so that no time is lost, is another common cause of failure. Some of the qualifications for successful generalship are certainly necessary on clinic days, or any day when several operations are to take place in quick succession. It is not alone what she herself does, but how she manages her whole force of assistants so that valuable time is not lost, that determines real success in management in this direction.

Just how much teaching the head nurse in the operating-room should do depends somewhat on circumstances and on how much teaching the pupil nurses have had along surgical lines before coming to the operating-room. How much she will do depends on herself, on her ability to give instruction, on her appreciation of her responsibility toward the pupil nurses assigned to her department. The opportunity for efficient teaching is in every operating-room. Illustrations of conditions, theories, and facts are easily found.

It does not require a stated hour and class-room paraphernalia in order to teach a valuable lesson in surgical practice. Much of the theory previously acquired along surgical lines ought to be reviewed and demonstrated while in the operating-room. The cleaning-up process

need be none the less thorough if the chief nurse takes occasion to question and explain regarding the various points about the operation that has just taken place, if there is no other operation to follow immediately. The preparation for an oöphorectomy for ovarian cyst, for example, need be none the less thorough and complete if the chief nurse uses the occasion to state in detail to her assistants the different steps in the operation,—the preparation of the field, the incision, the emptying of the cyst, drawing of the sac out of the abdomen, separation of adhesions, ligation of the pedicle and blood-vessels, excision of the cyst, cleansing of the abdomen by sponging or flushing, closure of the wound,—the instruments and appliances required for the different steps of the process, and the nurse's duty at each stage. Under such instruction the pupil nurses should come out of the operating-room with an intelligent idea of the work in all its details.

In no line of nursing is more good literature available than in the line of surgical nursing and operating-room work. And yet, there are many pupil nurses who come out of our operating-rooms after a three or four months' term who have been drilled in the mechanic work, taught to carry out a certain routine of duties in a mechanic way, but who have utterly failed to grasp the fundamental principles on which modern surgery is based, or to have any clear idea of methodic planning for such work elsewhere. They are careful about their work, or mean to be, but they are not intelligently careful, and when they have the entire responsibility of preparing for and assisting at an operation, they make breaks in technic which are absolutely inexcusable in these days of intelligence and exactness along surgical lines. For instance, a nurse

graduate of one of our large eastern hospitals, in preparing for an operation in a private home, boiled the water in a wash-boiler, but failed to provide anything but an unsterilized dipper to dip it out. Another nurse, after her term in the operating-room, did not know what was meant by the terms "ligature" and "suture," and could not write a list of the instruments required for even the simplest operation; could not state definitely how long would be required to sterilize any of the small instruments and appliances used every day in her work. There is a good deal that goes into some courses of lectures on surgical work in our training-schools that it would not make much difference if a nurse did not know. She can do good work if she does not know the difference between a greenstick and an epiphyseal fracture, if she does not know the history of the discovery of anesthetics, or a dozen other things which modern lecturers think "it is nice for a nurse to know." But if, after three months in an operating-room, she is not able to state intelligently how infection in a wound may take place, how organisms may get into a wound; if she cannot quickly place a patient in the different positions required for various treatments; if she does not know what instruments are likely to be required for an operation for appendicitis, then there has certainly been a grave deficiency in her training for which some one is responsible.

An operating-room nurse can afford to get on without some books on nursing which nurses in general practice should own, but she ought to be sufficiently ambitious in her own line to buy the latest and best books on operating-room technic that are available. This is an age of specialization along all lines. Hospital work needs

specialists among nurses quite as much as among physicians, while there will always be a demand for the all-round woman. Each year thousands of nurses are graduated. It ought not to be difficult for a hospital to secure a good operating-room nurse, or a good efficient head of an obstetric department—one who can not only manage her department, but can teach her specialty and put her own stamp on her nurses, but it is often difficult. Good head nurses are not readily found because so few nurses, comparatively, are willing to pay the price of efficiency along those lines, to dig, and study, and take time to thoroughly master the line of work they want to do; so few nurses, comparatively, who are real students throughout their entire professional lives.

CHAPTER XXV

The Head Nurse and Case Histories

What has a head nurse or any nurse to do with the writing of case histories, is a question that may properly be asked. Technically considered, such work belongs to the physician. The greater part of such work is done by physicians, and yet it is true that in some hospitals case histories will not be secured at all unless the head nurse secures them. In a considerable number of hospitals there are no internes; there is no one in the hospital available for such duties except the superintendent and head nurse. So, while some may criticize and say that case histories are things entirely out of a nurse's sphere, yet, as a matter of fact, in some places the dividing-line between a physician's province and a nurse's province is made of elastic. It can be and is stretched considerably when there is need. Physicians of today are requiring nurses to do a great many things that ten years ago were considered entirely in the doctor's sphere. A great many physicians are ready to trust an experienced head nurse with responsibilities which they would hesitate to trust to the young medical graduate or even to experienced practitioners who were unacquainted with their methods. Two points on which all medical men and well-trained nurses agree are that a nurse must not diagnose and must not prescribe. They agree that it is the business of the nurse to be an assistant and ally of the physician in his

endeavor to alleviate human ills. They agree, further, that she ought to study to be as efficient an assistant as possible. Whether her assistance shall be rendered in bedside observation and care, in the office or the operating-room, in investigation of the home conditions of his patient as they bear on the disease, or instructing the patient how to promote his own restoration to health; whether she shall undertake to secure for the physician certain facts that will assist him in diagnosis, depends entirely on circumstances and on the desire of the physician. Admitting, then, that the writing of case histories is a responsibility that is frequently committed to the head nurse, how shall she go about it? The term "case history" has different meanings to different physicians. The kind of case history she will be required to prepare will depend very largely on how thorough are the habits of the physician or the hospital in this respect. Some physicians have very systematic habits, and require a careful history of every individual case of any importance which they treat, and the same is true of institutions. Others claim to keep case histories, but the physician in the former class would regard them as practically valueless. They are too superficial, or too carelessly prepared to be of any real use to him. When the time comes that a physician needs to refer to a certain history to illustrate a point, or to help in arriving at a decision, he usually finds that, in the superficial, carelessly prepared histories, the very point he wanted has not been made a matter of record, and for his purpose the history has no value. In a great many hospitals, after twenty years of work, physicians have declared that no case records of any scientific value had been produced. In others the method of classification

and filing is so haphazard that the facts which have been secured are not accessible.

As the head nurse writes case histories, she will learn to write them, and in no other way. Skill in this line can never be acquired by the study of books. At the same time she can gain from the study of symptoms and from the methods of physicians and institutions much that will help her in preparing a case history that will contain the important facts about the patients with whom she will deal. Her work will, of course, have to be directed and supplemented by the physician in charge.

It is no part of her business to make a physical examination, to state exactly what operation was done, nor the pathologic condition found. The history for which a nurse may properly be responsible will be practically restricted to what she can see and what she can find out by questioning the patient.

A good many hospitals have history blanks prepared on which is printed an outline of the facts to be secured, with blank spaces left to be filled in. A very common mistake made by amateurs is in thinking that each blank space must be filled with something, whether the point has any bearing on the case or not. For instance, in taking the history of a patient admitted for a minor gynecologic operation, a young medical graduate in following the outline stated that the facial expression was "pleasant." It is, of course, interesting to know that any person about to undergo an operation is able to look "pleasant," but it was hardly necessary to state the fact under the circumstances. Not long since a superintendent questioned an interne as to whether or not he was keeping a history of every case admitted to his division. He replied that he

had not kept a history of every case. "In fact," said he, "a whole lot of this history-taking is absurd. Where is the sense of asking a man who comes in with his head cut, or his leg broken, whether his grandmother had the measles, what his grandfather died of, how many brothers and sisters he had, and how old they were when they cut their teeth?" This interne made the mistake of thinking that because certain facts were of value in some cases, they were necessary to be secured every time. The family history of the man with the wounded head or the broken bone might in most cases be properly omitted, but an accurate history of the present condition, the location and general characteristics of the wound, the condition of the patient on entrance, and various other facts concerning him should certainly form a part of the institutional records.

Before beginning to prepare a case history it is well to secure from the office the facts recorded in the admission form and avoid repeating these questions.

The admission blank will have spaces to record the name, address, occupation, place of employment, age, sex, race, nativity, social condition, whether married, single, widowed, religion, address of friends, name of physician who referred him, provisional diagnosis of examining physician, the date and hour of admission.

The family history is important in most cases. Experience will soon teach when it may be omitted as having no bearing on present conditions. The facts concerning the family history that are usually made a matter of record are: the number of brothers and sisters; whether they are living or dead; the general health of living relatives; causes of death; ages of father and mother; character of serious illness occurring in the life of either;

possible tendency to any particular form of disease, such as tuberculosis, alcoholism, nervous affections, rheumatism, or cancer.

The previous history of the average patient would include past habits and occupations, diseases of childhood and of adult life, injuries, previous attacks similar to the present, loss or gain in weight, dates, complications or sequels of past illness.

The character of the provisional diagnosis will determine the extent to which further inquiry along these lines should go. For instance, if the patient is a female and gynecologic disease is suspected, the history should state when the first menstruation occurred, whether menses are profuse or scanty, the duration, whether regular or irregular, painful, whether troubled with leukorrhea or other discharge. If the patient is married, the history should state at what age marriage took place; number of births, if any; if miscarriages have occurred; at what time during pregnancy; suspected or probable cause; number of miscarriages; whether functions were normal during pregnancy; general health while pregnant; character of labors—easy or difficult; short or prolonged; complications or diseases occurring during pregnancy; general condition during puerperium and also during lactation; time after birth at which menstrual flow returned; if babies died, at what age and from what cause.

The history of the present condition would include the chief complaint; condition preceding the attack; the mode of onset, whether sudden or gradual; location and character of pain, if any, whether sharp, throbbing, dull, or continuous; effect on other organs; possible predisposing causes; possible exciting causes; general

disorder of functions; physical defects, if any; general condition as regards nutrition; facial expression, whether pale, haggard, anxious, dull, listless, vacant, flushed, or excited; temperature, pulse, and respiration; character of discharges.

The condition of the skin is in many cases quite important to be noted—whether it is moist, dry, or rough, flabby, or wrinkled, firm, pink, and clear, jaundiced, sallow, bruised, or discolored; whether patches, scars, spots, or eruptions are present; whether shiny, waxy, or cyanotic; whether swelling or edema is seen. Any deviation from the normal structure of the body should also be noted, such as deformities or protrusions, asymmetry, lack of development, or apparent wasting of muscular tissue.

The progress and plan of treatment of all cases should be made a matter of record if these histories are to have any real value. The bedside records kept by nurses are important to be made from hour to hour if exactness in nursing is to be secured, but there is no need of filing away all these details about a case. There is nothing to be gained by piling up these bulky documents, unless in exceptional cases—such as serious accident cases. It is important that Peter Smith should get his baths periodically, that he have his temperature taken at intervals, that he sit up and lie down at proper times and seasons, that he have a cathartic occasionally, that he have proper meals served at the right time, but the great mass of these facts have no scientific value. After a certain time they are only so much useless lumber. It is important, however, that the head nurse or interne or whoever is responsible for case histories go carefully over these records and collect from them the facts which

have a real bearing on the progress and outcome of the case, and record it in the general history form. The temperature-charts of all cases should be added to this history.

If this is done regularly and promptly at the conclusion of each patient's stay in the hospital, when the case is fresh in mind, it will not entail much labor, and it will be found that facts that are of real scientific value in most cases can be recorded and filed in comparatively small space.

The case history of surgical patients should contain, besides the facts alluded to, an accurate record of the operation. This operating-room history should state at least the pathologic condition found, and exactly what was done, the ligature and suture material and anesthetic used, any complications that may have occurred, and the patient's condition at the close of the operation.

The value of this operating-room history is never more in evidence than when a laparotomy patient presents herself again for treatment complaining of pain or discomfort in the abdomen. With an accurate history telling exactly what was done it is much easier for a physician to arrive at the cause of the present trouble and often exceedingly difficult without it. The patient may give most misleading statements as to what previous treatment she had, and the most skilled physician may be led to a wrong conclusion. It might be expected that surgeons would all keep their own case records. A great many of them do, but experience has shown that a great many do not. In any case, a hospital needs its own records, and there are many circumstances in which head nurses can do

much to help in making those histories complete and valuable.

In obstetric work, perhaps the widest difference in the case histories kept by physicians and institutions will be found. The appended form for the histories of obstetric patients is the form in use in Columbia Hospital, Pittsburgh, and calls for a more exhaustive record than is commonly kept, especially in general hospitals. No head nurse should pretend to be entirely responsible for an exhaustive history of this character. It is inserted here simply as affording abundant suggestion from which a simpler history form may be prepared, should such necessity ever arise in a nurse's experience.

Never before in the history of hospitals has so much emphasis been placed on the study of symptoms as an important part of a nurse's work, not only while in training, but throughout her nursing experience. Never has so much and such thorough instruction on the subject been given in classes and current literature as during the past year or two. The nurse who has availed herself of these opportunities and has acquired concise, systematic, and clear methods of expression should certainly be able to prepare a case history which, so far as she has a right to assume responsibility for it, will contain the essential facts—the things that will prove of real value.

Mar 19.....
 Month.....
 Day.....

PATIENT'S HISTORY

Birth No.....

OBSTETRIC SECTION

PREGNANCY AND PARTURITION

Name..... Birthplace.....

Address..... Social Pos.....

Married, Single, Widow: Age..... Para..... Race..... Religion.....

Previous Diseases—Measles at..... Scarlet Fever at.....

Diphtheria at..... Enlarged Glands at..... Rickets at.....

Began to walk at..... mos.; Began to talk at..... mos.:

Menstruation began at..... years, was..... regular, every.....

..... days, lasting..... days,..... in amount,..... painful.

Diseases arising after establishment of menstruation.....

Family History.....

Record of previous pregnancies, births and puerperiums:.....

Eccentricity of present case.....

STATEMENTS CONCERNING

Age at time of first confinement.....

Date of last confinement.....

Date and character of last menstruation.....

Date of Quickening.....

Sinking of the Uterus?.....

Date..... and effect of.....

Probable date of confinement.....

PHYSICAL CONDITION

Temp..... Pulse.....

Height..... Weight.....

Musculature.....

Bone Structure.....

Heart.....

Lungs.....

Kidneys.....

Bowels.....

PELVIS

Interspinous.....	c. m.: Intercristous.....	c. m.: Bi-Troch.....
Conj. Ext.....	c. m.: Conj. Diagonalis.....	c. m.: Conj. Vera.....
Circumference.....	c. m.: Linea Innominata.....	
Sacrum.....		
Promontory.....		
Pubic Arch.....		
Spinal Column.....		
Form of Pelvis.....		

BREASTS—ABDOMEN—GENITALIA

Breasts.....	Nipples.....
Areola.....	Glands of Montg.....
Abdom. Walls.....	Circum. of Abdomen.....
Umbilicus.....	Height of Umbilicus.....
Striae.....	Height of Fundus.....
Course of tubes and ligaments.....	
Legs.....	Feet.....
Perineum.....	Labia.....
Introitus.....	Vagina.....
Vaginal Walls.....	Cervix.....
External Os.....	Internal Os.....
Vaginal Secretion—microscopic examination of.....	

FETUS

Back.....	Extremities.....
Buttocks.....	Head.....
Position and number of heart sounds.....	
Bruits.....	
Amount of Liquor Amnii.....	Movement of Fetus.....
Fontanelles.....	Sagittal Suture.....
Diagnosis of position.....	Month of pregnancy.....

REMARKS UPON THE COURSE OF PREGNANCY

RECORD OF LABOR

DAY AND HOUR OF		DURATION OF	Days	Hours	Min.
(a) First Stage		(a) First Stage			
(b) Second Stage		(b) Second Stage			
(c) Third Stage		(c) Third Stage			
		Total			
ANESTHETIC—Kind		Amt.			
Duration		Given by			
Duration and character of pains					
Position of fetus during labor					
Condition of child when born					
Position of Caput Succedaneum and other tumors					
Indications for and nature of assistance given					
Mechanisms—mechanism and treatment of					
Indications for and No. of internal exams. made					
CHILD: No. Sex Length Weight					
Shoulders—Width Circ Breast—Width Circ					
Hips—Width Circ Head—F. O. B. T. B. P. M. O.					
F. B. F. O. Circ. S. B. Circ. Hair Length Color					
Cartilage—Nose Ears Nails—Fingers Toes					
Testicles Prepuce Small Labia					
PLACENTA: Wt. Size Thickness					
Form Tissue Clots Chalk					
Cysts Cicatrices					
CORD: Length Thickness Insertion					
Twists Wound about					
MEMBRANES—Complete? Thickness Tear					
LIQUOR AMNII—Quantity Character					
ABNORMALITIES					

OBSERVATIONS DURING THE COURSE OF LABOR

Date

Hour

--	--

Phys.—Dr. _____ Res. Phys.—Dr. _____ Charge Nurse _____

Year 19 _____ Birth No. _____
Month _____

Name _____ Age _____ Para _____
Day and hour of birth _____ Presentation _____
Duration of labor _____
Abnormalities _____
Treatment _____

RECORD OF PUERPERIUM.

Day	Date	Hour	Position of uterus on 1, 4, and 7th days; lochia; cedema, lacerations; removal of sutures; breasts; general condition; bowels; urine; diseases; etc. etc.	TREATMENT AND DIET

Day	Date	Hour	PUERPERIUM	TREATMENT AND DIET

emp. at Birth.....

Weight at Birth.....

Length at Birth.....

[illegible]

DISCHARGE RECORD

MOTHER

Day and Date of Puerperium:

General Condition:

Anæmia:

Breasts:

Perineum:

Introitus

Vagina:

Cervix:

External Os:

Internal Os:

Uterus:

(a) Size:

(b) Position:

(c) Fundus:

Parametrium:

Exudate:

CHILD

Day and Date

General Condition:

Weight:

lbs.

oz.

(a) Initial

(b) Discharge.....

(c) Difference in.....

Length:

Umbilicus:

Eyes:

Mouth:

Skin:

Injuries:

Paralyses:

REMARKS

MEDICAL DEPARTMENT

SERIAL NO.

MED. No.

Name M. S. W. Age Nativity

Residence Admitted ROOM }
WARD }Occupation W. B. Discharged
M. F.Diagnosis Well Imp'd.
Not Treated Died

Physician Resident Unimp'd Transf'd

I. FAMILY HISTORY

Gout, Rheumatism, Syphilis, Tuberculosis,
Alcoholism, Nervous Affections, Cancer and
Family Deaths.

II. PREVIOUS HISTORY

Habits, Occupation, Diseases of Childhood,
Venereal History, Rheumatism, Gout, Tuberculo-
sis, Malaria, Typhoid, etc.; Previous Similar
Attacks, Change in Weight, Previous Injury
(Dates), Complications and Sequels.

III. PRESENT ILLNESS

Onset and Chief Complaint, Nervous Symptoms,
Alimentary Symptoms, Abdominal Symptoms,
Respiratory Symptoms, Cardiac Symptoms, Skin,
Joints, Muscles, Genital Organs, Kidneys.

IV. PRESENT CONDITION

1. General Condition, Development, Nutrition,
Weight.

2. Condition of Skin.

(a) Complexion, Anemia, Hyperemia, Cyanosis,
Icterus, Pigmentation.

(b) Degree of Moisture.

(c) Degree of Surface Heat, Local or General.

(d) Edema.

(e) Emphysema.

(f) Subcutaneous Hemorrhage.

(g) Collateral Circulation.

(h) Trophic Disturbances.

3. Examination of Chest.

(a) Shape; General Type.

(b) Frequency and Rhythm of Respiratory
Movement.

(c) Excursion.—Degree, Symmetry.

(d) Palpation, Percussion and Auscultation of
Chest.—Heart and Lungs.

4. Examination of Pulse as to Frequency,
Rhythm, Strength, Compressibility, and Condition
of Arterial Walls.

5. Inspection, Palpation, and Percussion of Ab-
domen.

6. Exhaustive Examination of Diseased Part or
Location.

7. Examination of (in Special Cases) Eye, Mouth,
Pharynx, Larynx, Nose, Stomach, Nervous
System, Rectum, Vagina, etc.

Observe the following outline in writing the history and recording the results of the examination of the patient.
Number according to this outline.

SURGICAL DEPARTMENT

Name, Date of admission, 190

Sex, Age, Nationality, Race,

Occupation, Residence,

Sent by Religion,

Name and address of friends

Surgeon in Charge, Assistant,

Resident Surgeon,

History,

Condition on admission

Diagnosis,

O P E R A T I O N

Nature, Date, 190

First assistant, Second assistant,

Anesthetist,

Preparation of patient,

Condition prior to operation,

Anesthetic,

Pathologic condition found,

Mechanics of operation,

Duration of operation,

Ligature and suture materials,

SPECIMENS: (a) for preservation,

(b) for microscopic examination,

(c) for bacteriologic examination,

Complications during operation,

Condition at close of operation,

PROGRESS AND AFTER-TREATMENT

Condition when dismissed,

Result,

Date of discharge,

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